Regional BATA Interface Control Document

Rev. 1.6.8 Final

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ACS
State and Local Solutions, Inc.

Revision History

Revisions of this document are listed in chronological order. There is no relationship between the document release number and the software release number.

Document Version Number	Date of Revision	Descriptions of Revisions	Software Version Number
1.0	06/18/04	First formatted version	
1.1	07/07/04	1. Table 10.2 Added TOL_FULL_FARE_AMT to the detail record structure. 2. Section 11.4 - Added AGENCY field to the Detail structure specification. 3. Section 16.4 – Added VIOL_TYPE to the detail record structure format. 4. Section 17.3 – Changed 'File Use' comment, to reflect file going out from VECTOR CSC to GGBD. 5. Section 17.4 - RECON_STATUS/VIOL_TYPE/BUSINESS_DATE to the detail record structure. 6. Section 17.4 – Removed BUSNIESS_DATE from the trailer record structure. 7. Section 19.4 – Added LAST_NAME to the DMV Response file structure. 8. Section 20.3 – Added milliseconds to the Image filename format. 9. Section 20.4 – Added milliseconds to the TRX_TIME field format. 10. Section 20.2 – Added milliseconds to the VDF filename format. 11. Section 22 – Added Appendix B to list the RCSC Reason Codes for BATA. 12. Added Processing rules to the document.	
1.2	08/04/04	1. Removed CALTRANS Differential file layout. 2. Removed GGBD Differential file layout. 3. Removed CALTRANS .recb file layout. 4. Removed VIOL_TYPE from the GGB interface. 5. Removed RECON_STATUS from the GGBD reconciliation file interface. 6. Added resolve_code to the GGBD interface. 7. Added list of resolve_code to the GGBD interface. 8. Added GGBD Violation transaction file interface.	

			9. Added GGBD Violation Reconciliation file interface. 10. Added DMV Hold interface. 11. Added DMV Response interface. 12. Added ack file, processing rules.	
	1.3	08/18/04	1. Added processing rules for tag files in Section 2. 2. Added processing rules for 1-year-old transactions for home agencies. 3. Updated Section 7.5 to define time of processing of transactions. 4. Updated section 6.5 to reflect tag file threshold limits. 5. Updated Section 7.2 to reflect GGBD file naming convention 6. Updated section 7.4 to reflect 'source/destination' values 7. Updated section 7.5 to reflect tag file threshold limits. 8. Updated section 8.3 (tag_own_agency) to reflect all tag owning agencies 9. Updated Section 8.4 to reflect $ amounts for transactions 10. Updated Section 14.5 to reflect time limit on accepting transactions at the CSC 11. Updated Section 15.5 to reflect recon values for home and away agencies 12. Updated Section 17.5 to reflect violation transactions business rules. 13. Added interim codes to Appendix B. 14. Added transaction processing business rules, as Appendix D	
	1.4	10/12/04	1. Updated CTOC file transmission time for weekly comprehensive download. 2. Updated Section 10.5 to add ack code for error in loading tag files. 3. Updated Section 14.3 to default the DST flag to '*' 4. Updates processing rule #5 in Section 14.5. 5. Update processing rule #8 in Section 15.5. 6. Updated Section 17 to reflect return code for resolve_codes 90 – 99 7. Updated VDF receipt timeframe in Section 20. 8. Added new column to table 1.1 to reflect the file delimiters. 9. Updated Section 20 to reflect default values for non-OCR records. 10. Added field csc_account_no to the GGBD response file interface. 11. Added reason code #98 in Appendix B. 12. Moved reason code #99, from reconciliation section to the home section, in Appendix B 13. Updated Appendix C with additional information. 14. Updated processing rules in Section 10.4	
	1.4.1	10/20/04	1. Updated processing requirements for the business day file.	

			2. Updates processing requirements for the cancel file. 3. Updated Section 20.2 with example filenames for GGBD. 4. Added processing rule to Section 20.5 5. Updated processing rules for GGB	
	1.4.2	10/27/04	1. Added sample files to Section 14,15,16 and 17 2. Added Appendix E	
	1.5	11/20/04	1. Updated Table 1.1 2. Updated Section 2- General processing requirements to reflect the currency representation in the transaction files. 3. Updated Section 5 - CTOC processing rules to reflect the 1 file concept for incoming and outgoing files. 4. Updated Section 7.6 with sample file. 5. Updated Section 13.5 – Processing rule #10 6. Updated Section 15.5 – Processing rule #3 7. Updated Section 17.5 – Processing rule #3 8. Updated Appendix E 9. Updated Section 20 to represent the default values for some fields.	
	1.5.1	11/30/04	1. Updated GGB sample files to match file layout. 2. Section 7.5: Added processing rule 3. Updated Section 15.4 to show the static values for CTOC a/c #'s	
	1.6	12/13/04	1. Moved Appendix C to Appendix E 2. Updated per BATA comments on v1.5.1	
	1.6.1	01/03/05	1. Updated Tag file naming conventions for both CALTRANS and GGBD 2. Updated Section 18 file-format 3. Updated Section 19 file-format.	
	1.6.2	02/13/05	1. Updated client code value in DMV Hold request and response files. 2. Added Appendix E – File Sanity Checks 3. Updated Section 1 with an additional Interface Server on the Caltrans domain. 4. Updated document, wherever necessary, as a result of the new Interface Server. 5. Updated filenames for Caltrans tag file. 6. Added Appendix E	
	1.6.3		1. Updated Appendix E with latest IP address information. 2. Updated GGB fare amount columns and sample data to reflect accurate $ value formats. 3. Updated Caltrans Tag status file to remove the 'milliseconds' from the header record. 4. Updated CALTRANS .rec file timestamp in the header record. 5. Updated GGB .req file – tol_avc_class to '2' to match the sample file provided by GGB	
	1.6.4	03/08/05	1. Updated Appendix F with latest IP address information.	

			2. Updated GGB fare amount columns and sample data to reflect accurate $ value formats. 3. Updated Caltrans Tag status file to remove the 'milliseconds' from the header record. 4. Updated CALTRANS .rec file timestamp in the header record. 5. Updated CALTRANS .rec file to remove the NON_REV_ETC_EXCEPT _AMOUNT column as it does not match with the current production .rec file received by the CALTRANS host. 6. Updated GGB .req and .vio files – tol_avc_class to '02' 7. Updated GGB .req file sample filer header record to 'REQ ' 8. Updated GGB .req TO_FARE_CASH_AMT field to default to '00000' 9. Updated Section 18 based on CALTRANS inputs on the record layout 10. Added processing rule #13 in Section 14.5 11. Updated field definition in Section 15.4 for BUSINESS_DATE field 12. Added processing rule #8 in Section 16.5 13. Updated field definition in Section 17.4 for BUSINESS_DATE field 14. Updated Section 15.5 processing rules with comments from Section 26-2 and 26-3	
1.6.5	04/28/05	1. Updated Table 1.1 to reflect accurate filenames 2. Added Appendix G 3. Updated Section 18 file layout 4. Updated Section 19 file layout 5. Updated Section 7.2 – file extensions for CTOC tag files. 6. Updated Appendix B to add 1 new code 7. Updated Section 28.2 for GGB drop box IP change.	
1.6.6	05/16/05	1. Updated Section 2 Item #14 2. Added plaza codes list in Section 8 3. Updated Section 29 – Appendix G 4. Updated section 8 (agency field definition) 5. Updated section 9 (agency field definition) 6. Updated Section 13 (agency field definition) 7. Added interim and final transaction states to Appendix B 8.	
1.6.7	06/24/05	1. Updated Section 2, #14 2. Remove LF in the .rec and .reca file trailer record for Caltrans 3. Updated Section 8.2 and 8.5 4. Updated Section 9.1 and 9.2 5. Updated Section 11.2 6. Updated Section 13.1 and 13.2	
1.6.8	04/28/06	1. Update Table 8.2 with msg_cmd processing requirements 2. Update Figure 12.2 – Swap msg_seq and veh_seq fields in the file layout	

Document Ownership

Owner	ACS State and Local Solutions, Rockville MD
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Important: This document has been through a formal review process. To the best of our knowledge it is accurate. ACS reserves the right to make further modifications as necessary.

Document Location:

Trademarks

Contents

1. Introduction

The *VECTOR-Regional BATA Interface File Specifications* document defines the formats for all files that shall be transmitted between the BATA Regional Customer Service Center application (henceforth referred to as "VECTOR") and the CALTRANS and GGBD Hosts (henceforth referred to as "BATA" in the remainder of the document).

The interface files allow the CSC to perform the following functions:

- Transmit comprehensive and differential/cumulative tag status files to BATA at regular intervals (time periods to be defined in business rules) on a daily basis.
- Receive regular transactions due to customers using the CALTRANS and GGBHTD agency's facilities.
- Receive violation transactions due to customers using the CALTRANS and GGBHTD agency's facilities.
- Transmit reconciliation feedback to the Plaza/Host of the constituent BATA agencies.

A new server, Interface Server, shall reside within the Caltrans network and a socket program will communicate with each of the Plaza servers to pull down the violation transaction details (transaction and images). This Interface Server shall communicate with the Caltrans drop box, for transfer of all incoming and outgoing files between the ATCAS host and RCSC drop box. The Interface Server, while being developed by ACS, will be administered and maintained by Caltrans after the successful implementation of the RCSC.

The interface files are defined in Table 1-1 below:

Table 1-1 Interface files

No.	File Name	File Ext	File Usage	Field Separator	ACK file created by -
1	CALTRANS Tag Status File	ETC	Created by the VECTOR application to inform the CALTRANS Host as to the status of each tag on the system. It includes – - HOME agency tags (CALTRAND and GGBD) - CTOC agency tags like SANDAG, TCA, SR-91 All the above records shall be in 1 file and zipped before transmission to CALTRANS host.	'I' delimited	Interface Server

No.	File Name	File Ext	File Usage	Field Separator	ACK file created by -
2	GGBD Tag Status File	ETC	Created by the VECTOR application to inform the GGBD Host as to the status of each tag on the system. Vector will generate tag status file for CALTRANS tag range, GGBD tag range separately. Transmission from CSC to GGBD will include: - 1 CALTRANS file - 1 GGBD file - 1 file for each of the CTOC agencies All the above individual files, shall be zipped into one file before transmission to GGBD Host.	',' separated and fixed length	GGBD Host
3	CALTRANS ETC Transaction/Violation File	TRE	Created by the CALTRANS Hosts to inform the VECTOR CSC of all regular/normal ETC transactions on accounts with a valid tag and violation transactions with or without a tag.	'l' delimited	BATA CSC
4	CALTRANS ETC Transaction Reconciliation Summary File	REC	Created by the VECTOR CSC to inform the CALTRANS Host about the disposition of toll transactions processed at the VECTOR CSC. A summary of transaction by Tour ID allows the CALTRANS Host to ensure that all transactions were properly received and processed at the VECTOR CSC and to track normal tolls.	'l' delimited	Interface Server
5	CALTRANS ETC Monthly reconciliation file (revenue attached to lane transactions)	RECA	Created by the VECTOR CSC to inform the CALTRANS Host as to the summary of the disposition of any revenue that can be tied to a transaction at the lane. This level of reconciliation allows the CALTRANS Host to ensure that all revenue is properly reconciled to generate financial reports.	'l' delimited	Interface Server
6	GGBD ETC Transaction File	REQ	Created by the GGBD Host to inform the VECTOR CSC of all home agencies tagged transactions (valid and invalid) and valid CTOC tagged transactions. (Invalid CTOC tagged transactions will be processed as violations and will not be part of this interface)	',' separated and fixed length	BATA CSC
7	GGBD Violation File	VIO	Created by the GGBD host to inform the VECTOR CSC of all violations (tagged and untagged). The record format is identical to that of the GGBD ETC Transaction file.	',' separated and fixed length	BATA CSC
8	GGBD ETC Detailed Reconciliation File	RES	Created by the VECTOR CSC to inform the GGBD Host as to the disposition (posted or rejected) of each transaction in the REQ files.	',' separated and fixed length	GGBD Host

No.	File Name	File Ext	File Usage	Field Separator	ACK file created by -
9	GGBD Violation Reconciliation File	VRES	Created by the VECTOR CSC to inform the GGBD Host as to the disposition (posted or rejected) of each transaction in the VREQ files.	',' separated and fixed length	GGBD Host
10	CALTRANS Transaction Cancellation File	CAN	Created by the CALTRANS Host to inform the VECTOR CSC of the ETC and violation transactions that need to be cancelled/ignored. This file shall contain transactions that would need to be ignored / reversed at the CSC. The transactions from this file shall not be included as part of revenue reconciliation (REC file) between the VECTOR CSC and CALTRANS Host	'l' delimited	BATA CSC
11	CALTRANS Business Day File	ADT	The CALTRANS Host generates a business day summary of transactions for the VECTOR CSC to assign the right business day to the transactions.	'l' delimited	BATA CSC
12	BATA Acknowledgement File	ACK	Created by the Receiving System to Acknowledge that the file transmitted was received in its entirety. An Acknowledgement File shall be sent for each of the above referenced files.	Fixed length	N/A
13	B ATA DMV Request	DMV	Created by the VECTOR CSC to request Name and Address information from the DMV for toll evaders on the GGBD and CALTRANS Lanes.		N
14	BATA DMV Response	data	Created by the DMV System (via dedicated DMV link) to inform BATA Regional CSC about the name and address Information as a response to a DMR file (DMV Request)		N
15	BATA Violation Image Data File	VDF	Created by the BATA Hosts to inform VECTOR CSC about the details to be used to match Image to a lane transaction.	Fixed length	N
16	BATA DMV Hold/Clear Request File	dat	Created by the VECTOR CSC to request DMV Hold/clear on license plates, for toll evaders on the GGBD and CALTRANS Lanes.		N
17	BATA DMV Hold/Clear Release File	don	Created by the DMV System (via dedicated DMV link) to inform BATA Regional CSC about the status of a hold/clear request, as a response to a REQD file (DMV Hold/Clear Request)		N

2. General file processing requirements

1. In the current scenario since the VECTOR CSC services multiple agencies (GGHBTD and CALTRANS), a single FROM_AGENCY_ID shall be used in tag file and transaction file transfers with the BATA Hosts.

2. The VECTOR BATA REGIONAL CSC will transmit one tag status file to the Away CTOC agencies. The filename shall use (FROM_AGENCY_ID - AT). The transaction files (Toll charges file or Pay by Plate file) will also be sent as 1 merged file, which includes all CALTRANS and GGBD transactions. For all TCA customers traveling on CALTRANS and GGBD, the Toll charges file will be sent with from agency as “AT”.

3. The VECTOR BATA REGIONAL CSC shall receive 1 file for both CALTRANS and GGBD transactions from CTOC agencies. Example: For all transponder in the Golden Gate ranges and CALTRANS ranges, traveling on TCA plazas, VECTOR BATA REGIONAL CSC can receive transactions files with “AT” as the destination agency.

4. All files (except for the Acknowledgement File) shall be compressed (ZIPed) using a standard Lempel-Zif compression algorithm that yields a compression rate of at least 75% (meaning a file will be reduced so that it is only 25% of its original size).

5. When compressed, file names shall be converted from {FILE_NAME}.{FILE_TYPE} to {FILE_NAME}_{FILE_TYPE}.ZIP. Therefore, when file “FILENAME.EXT” is compressed, the compressed file shall be named “FILENAME.EXT.ZIP”.

6. All files transmitted between the VECTOR CSC and CALTRANS Host shall contain a CRC check sum as part of the trailer that shall be used to check the integrity of the file. The checksum shall follow the algorithm outlined below. VECTOR CSC to GGBD host interface will be without any checksum logic.

7. Receiving agencies shall apply, but not limit to, the following validation logic –

    - Record format validation including header, detail and trailer records.
    - Record length
    - Tag number validation, if applicable (with the Title 21 facility range)
    - Checksum validation (CALTRANS/CSC only)
    - Record count matching with counts in the header/trailer

8. All files shall follow the data format types and field validations will be performed based on the format type rules. In case the format type is not defined, the standard interface techniques will be adopted. Rules for

- Number fields are those fields that contain only decimal values (base 10). The data shall be left -padded with zeros. In a field of length 5, Value 100 will be represented as 00100.
- Hex Number fields are those fields that contain only hexadecimal numerical values (base 16). Data will be Left Padded with zeros. In a field of length 5, Value 1EF will be represented as 001EF.
- Char will be all fields will contain alphanumeric values. Data will be Right Padded with spaces. In a field of length 6, Value GGBD will be represented as "GGBD".
- All date, time or timestamp fields will have the specified format.
- All currency fields that have a definition of CHAR (5,2) shall be represented as $5.05 = 5.05 and CHAR (5) shall be represented as $5.05 = 505. The CHAR (5,2) means that there will be 2 places reserved after the decimal for that data type. The CHAR (5) means there is no decimal point for that data type.
- All money/currency data, which is of type char (xx, x), shall be represented in the file as fixed length and right padded with spaces. The decimal point shall not be counted as part of the field length. E.g. tol_fare_amt of char (5,2) shall be represented as '5.05 '

9. The 32-bit Transponder ID Number Field is specified in the Title 21 standard. Refer the CTOC document (Interagency Electronic Data Interchange), section California's Definition for Title 21's 32-Bit Transponder ID Number field for the data field definitions of Tag Type, Facility code and Internal Tag Id.

10. For the facility code ranges Refer CTOC document (Interagency Electronic Data Interchange), section California Facility Code Ranges.
11. It will be responsibility of the file creator to push the file to the drop box or agreed upon location. Examples: In case of tag status file BATA REGIONAL CSC will push the tag status file to agreed upon location and in case of Violation images it will be CALTRANS / GGBD Host responsibility to push the images to agreed upon location.
12. The first comprehensive tag download file will be sent to the ftp drop box no later than 4 am. All subsequent comprehensive tag download files will be sent in 6hour intervals (i.e. the first tag file will be no later than 4 am, then 10 am, 4 pm and 10 pm).
13. CSC will send a daily tag status file to all CTOC agencies, no later than 1 a.m.
14. CSC will look for the daily CTOC comprehensive tag files on the ftp drop box, no earlier than 2 am. In the event of no file being available from any CTOC agency, the previous days comprehensive tag file will be used and sent to the CALTRANS and GGBD host. The next day the latest tag file will be used to send to the CALTRANS and GGBD hosts. All tag status files sent to GGB and Caltrans during the day will include the CTOC files received by the 2 am cutoff. Any updated CTOC files received after that time will not be included in the tag status files sent to GGB and Caltrans
15. Hex = Hex to be treated as a Hex (base 16) number. This is the ASCII representation of hex digits. Allowable ASCII characters are "0123456789ABCDEF" (note upper case alphas). There is one ASCII character for each Hex digit and therefore two ASCII characters per binary byte, left filled with ASCII zeros. The two binary bytes of:

Most Significant Byte

MSBit LSBit

1	0	0	1	0	0	0	1

Least Significant Byte

MSBit LSBit

1	0	1	0	1	1	1	0

Would be represented in an eight character hex field as “000091AE”

- Len indicates the expected length of the field (in bytes) for certain data types or values.
- The ASCII pipe character is indicated as “|”
- The ASCII line feed character is indicated as “lf”
- The ASCII NULL character is indicated as “NULL”
- The ASCII space character is represented as “ “

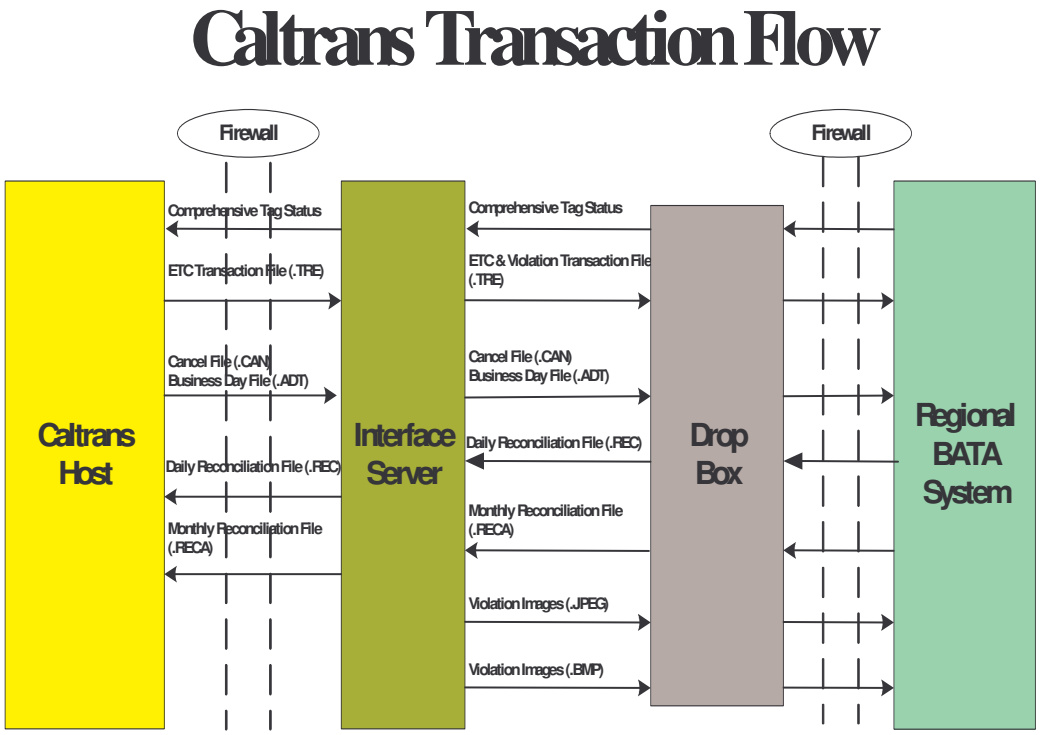
3. Transaction Interface – CALTRANS

The CALTRANS toll agency consists of seven plazas Antioch, Richmond, Bay Bridge, San Mateo, Dumbarton, Carquinez and Benicia. Toll transactions, Violation transactions and Images are sent from the Lanes to the Plaza/Host in near real time. CALTRANS Host will interface with the BATA REGIONAL CSC using the Host / CSC Interfaces. The CALTRANS Host requires BATA REGIONAL CSC to comply with the Business Day concept and all its interfaces are very closely tied to business day. The Business Day is defined between 10:00 PM to 10:00 PM, however as described below, transactions are assigned to a business day by 'tours' and this may result in a transaction assigned to one business day when that transaction may have actually occurred in the previous or next business day.

BATA REGIONAL CSC will send a comprehensive tag status file as defined in Section 2 of the ICD. The tag status file will include all the tags in the system (Assigned or Unassigned to an Account). The Away agency tags will also be part of this comprehensive tag file.

CALTRANS Host will send all ETC transactions to the CSC in the ETC transaction File. The violation transactions shall be sent to the **I**nterface **S**erver. This Interface Server shall be sending the violation transactions in the ICD specified format, to the BATA CSC. The transaction files will be sent at regular intervals to the CSC for processing. Each transaction is associated with a TOUR. Tour is unique for a Collector, Plaza and Lane for a Business day. In the transaction files CSC can receive a regular transaction followed by cancel transaction. A cancel transaction is generated at the Plaza as a result of Toll Audit performed by Toll Collector. Every Cancel transaction results in reversing a posted transaction or ignoring transaction. Some Cancel transactions are generated at a later time and are sent in Cancel File. The Cancel file for a Business day will be sent at the end of Business day. All away agency transactions for a Business day should be sent only after receiving Cancel file as CTOC spec doesn't support corrections / reversal of a transaction.

Table 3-1 The Interface flow between BATA Regional CSC and CALTRANS Host



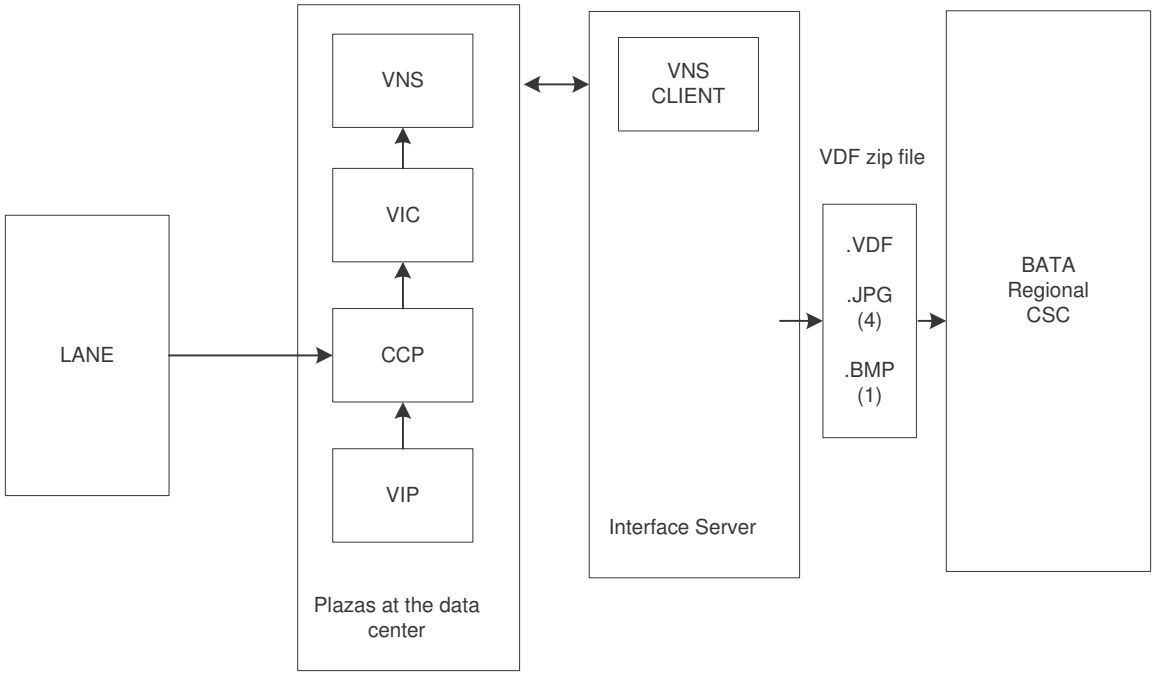
At the end of Business day, CALTRANS Host will send a Business day file containing a summary of transactions by tour id. This file will assign all tours to a Business day. Host generates Business day file upon receiving all transactions from the lanes. The BATA REGIONAL CSC will generate a Daily Reconciliation file, which will include all the tours, received for a Business day. Daily Reconciliation file will contain the summary of transaction count and amount by tour. The transactions received in a Cancel file will be excluded in the Business day file and Daily Reconciliation file. In the Daily Reconciliation file for all away transactions the amount will be the expected amount. The CSC business day shall be considered as “closed” only upon successful processing of the business day file on the CSC and the generation of the daily reconciliation file back to the CALTRANS Host.

For a calendar month, when Daily Reconciliation file has been sent for all the days, a monthly summary file is sent to the Host. This monthly summary file contains all the transaction count and associated amount for the complete month. Plaza, Revenue Month and AVC Class are used to summarize all the records in this file. The monthly summary file (RECA) shall contain the reconciliation summary of all ETC transactions (TOL_MSG_CMD = 330) only. The VECTOR CSC shall not create a RECB file at this time. There is no detailed transaction reconciliation between the BATA REGIONAL CSC and CALTRANS Host.

Violation Images will be transferred from the Lanes to Plaza using the existing interface. The VPC client who pulls the images from the Plaza will reside on the Interface Server. The Interface Server will convert the Violation data packet into Image files. The Interface Server will send all the matched images to the CSC on a regular interval for further processing. The image names will follow the

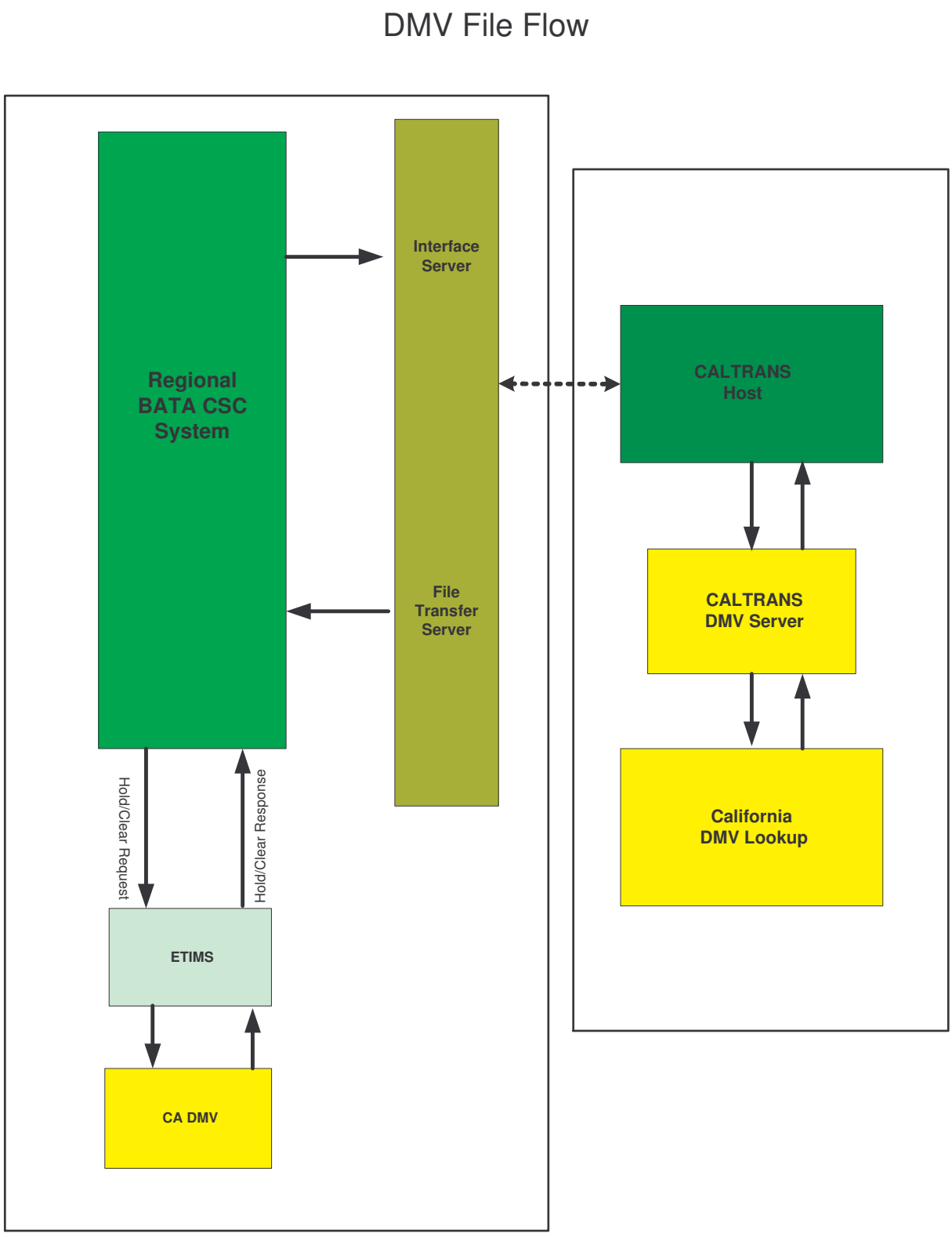
Image Naming convention and Violation Image Data file will contain the Violation transaction and Image filenames.

Figure 3-2 CALTRANS image flow to BATA regional CSC



BATA REGIONAL CSC will use the current DMV Interface between the CALTRANS CSC and California DMV. The DMV Request file will be sent from BATA REGIONAL CSC to the DMV server in the current Interface format. The CALTRANS Host shall send the DMV response file to the BATA REGIONAL CSC via the Interface Server and the file will follow the current DMV Response Interface format.

Figure 3-3 DMV lookup interface flow

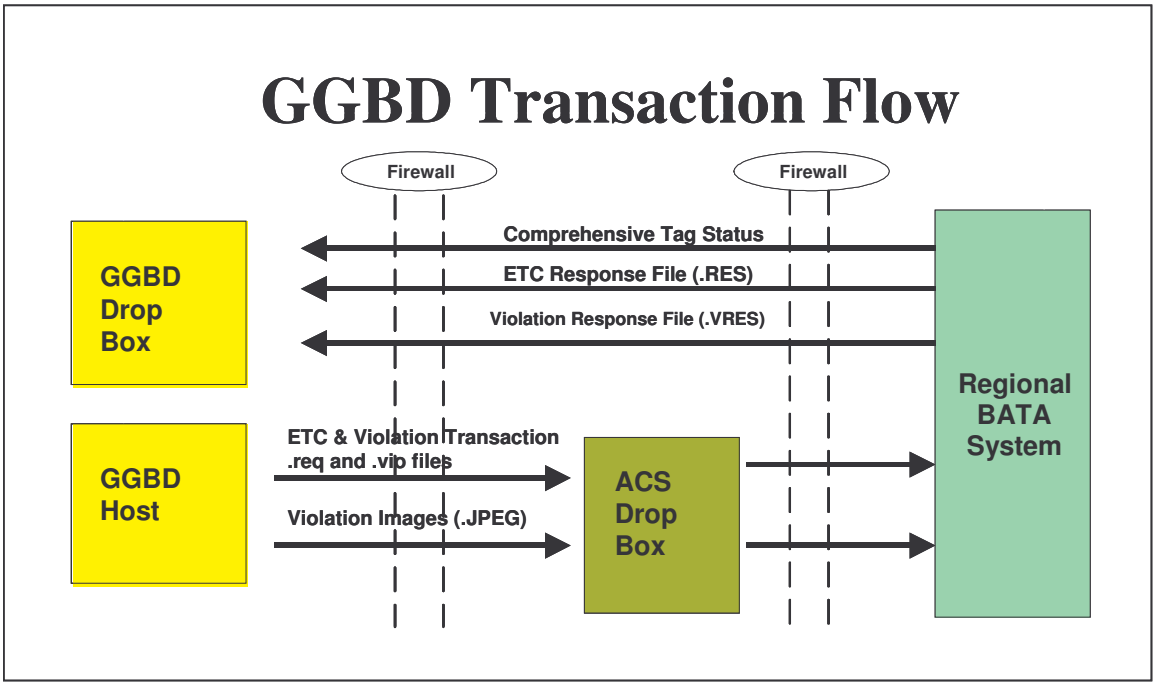


4. Transaction Interface – GGBD

The Golden Gate Bridge toll agency consists of one plaza Golden Gate Bridge Plaza. Toll transactions, violation transactions and images are sent from the Lanes to the Plaza/Host in near real time. Golden Gate Bridge Host will interface with the BATA REGIONAL CSC using the Host / CSC Interfaces.

BATA REGIONAL CSC will send comprehensive tag status files, as defined in Section 2 of the ICD, to the GGBD host. CSC will generate tag status file for CALTRANS tag range, GGBD tag range separately. Transmission from CSC to GGBD will include 1 CALTRANS, 1 GGBD and 1 file for each CTOC agency. All these individual files will be zipped in one file prior to sending to GGB. The tag status files will include all the tags in the system (Assigned or Unassigned to an Account). As the CSC will send the away tag status file for the GGB host, it (CSC) will be able to perform the required audit questions if and when tolls are disputed from the other agencies.

Table 4-1 The Interface flow between BATA Regional CSC and Golden Gate Bridge Host



GGBD Host will send all tagged transactions to the CSC in the ETC transaction file. The transaction files will be sent at regular intervals to the CSC for processing. Some the tagged transactions may also be violations. The CSC will respond to these transactions with an ETC Response file (RES) at regular intervals.

Those tagged violations that were paid-on-import will be identified and will not require any further processing by the CSC. Golden Gate Bridge Host will then send, once per day (Note: CSC is capable of processing multiple violation files within a day), all violation transactions to the CSC via the Violation Transaction file. Note that ALL violations, including those that do not require processing will be sent to the CSC. Violations that do not require processing will be reconciled immediately and included in CSC reports. Due to the fact that tagged violations are sent to the CSC twice (once in the ETC Transaction File and once in the Violation Transaction file) the Transaction number and the violation number will be switched for each violation transaction in the file to ensure that the CSC receives a unique transaction number for all transactions. Note that the range of violation numbers and transaction numbers do not overlap. Please refer to the section on General Transaction Processing rules for additional information.

Golden Gate Bridge Host will send all the violation images to the BATA REGIONAL CSC on a regular interval. Each transaction will have four jpeg images and violation data image file. The violation data image file will allow the Golden Gate Bridge Lane / Plaza to provide the OCR image output like license plate information, confidence level to the CSC. Note that the GGB does not currently use OCR and currently has no plans for its implementation.

The requirement from the Host to be able to request the current reconciliation status of already sent transaction will be met using the same interface with a different transaction type in the ETC transaction file layout. The ETC transaction file sequence number in its header will be used to check out of sequence files and in the event of receiving out of sequence file processing will continue but the file will be Acknowledged, as per the .ack file processing rules as defined in Section 10. CSC will be able to ignore the file with no-activity on the facility.

BATA REGIONAL CSC will use the CALTRANS DMV Interface for processing all the Golden Gate Bridge violation transactions requiring DMV plate lookup. The DMV Request file will be sent from BATA REGIONAL CSC to the DMV server in the current Interface format. The BATA REGIONAL CSC will pull the DMV Response file from the FTP Drop Box and the file will follow the current DMV Response Interface format.

5. Transaction Interface – CTOC – Interagency

The entire transaction Interface between BATA Regional CSC with the away agency will conform to CALIFORNIA TOLL OPERATOR COMMITTEE ("CTOC") technical specification Revision G.3. There will be three away agencies San Diego (SNDG), SR-91 (SR91) and TCA (OTCA) and One Home Agency BATA Regional CSC.

Every day BATA Regional CSC will create and send a Tag Status file to each of the three away agencies and receive a tag status file from each of the three away agencies. The tag status file going to away agencies will be a comprehensive tag status file generated once a day and will include all of the home agency tags. There is no Acknowledgement file between the agencies and if a corrupt file is received it will be the responsibility of the receiving CSC to communicate to the sending agency on the next Business day. There is no provision for differential tag status file between the agencies.

BATA Regional CSC will create one tag status file containing tag ranges of both CALTRANS and Golden Gate Bridge. As the file naming convention and header requires a source agency, the current plan is to use "AT" CALTRANS agency code for sending tag status file.

There are two types of transaction files to support exchange of transaction information. All tagged transactions are sent in the Toll Charges file and all license plate transactions are sent in the Pay By Plate file. There are no transaction corrections supported between the agencies. Each agency has14 days to reconcile transactions and all transactions older than 30 days require special processing by the receiving agency.

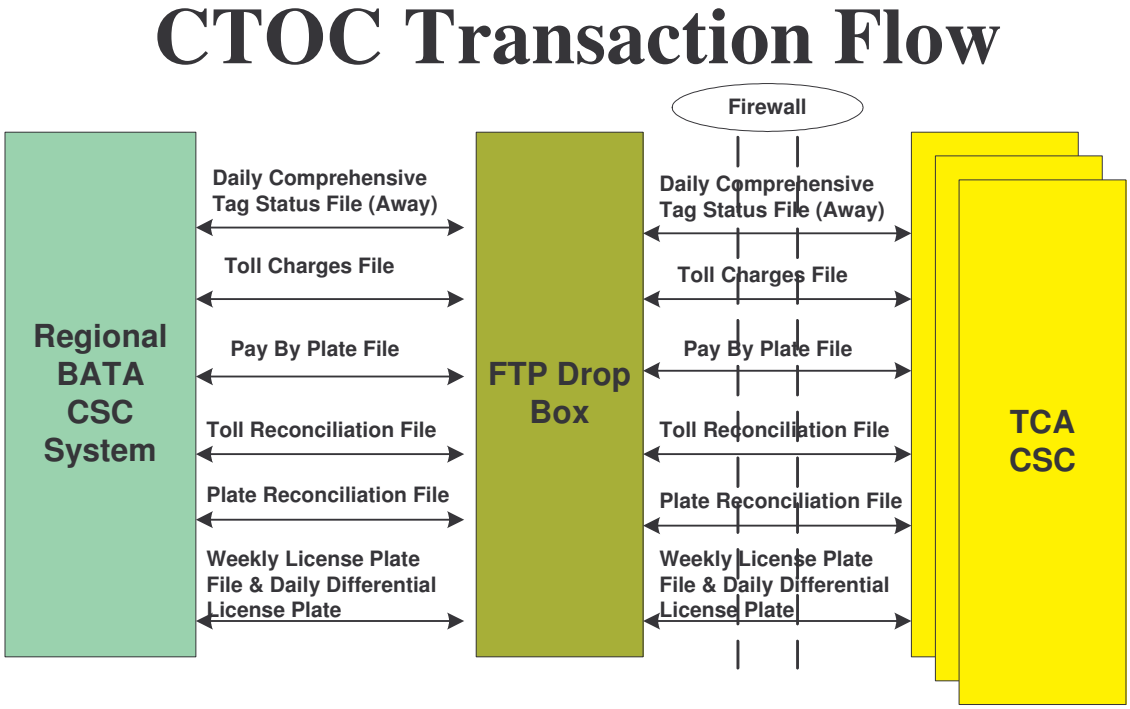
For all outbound transaction files, transactions from each plaza agency will be merged into one file. For e.g. All TCA customer transactions occurring on Golden Gate Bridge will be merged with TCA customer transactions occurring on CALTRANS plazas and sent to TCA in 1 file.

For all inbound transaction files BATA Regional CSC will be able to accept 1 merged file with Golden Gate Bridge tag ranges and CALTRANS tag ranges.

Reconciliation of transaction files is done at a file level containing the final disposition of each individual transaction. Each transaction reconciliation status will adhere to the CTOC Specification.

License Plate Status file is created to allow away agency to identify the CTOC customers. The file will contain all the valid customers license plate. Each agency on a weekly basis generates a comprehensive license plate file. CSC shall send the comprehensive plate file for CTOC agencies, no later than 1 am on Sundays. Delta License plate file since the last comprehensive file will be sent to away agency on a daily basis. The license plate additions and deletions are part of this file. Please refer to Appendix A of this document for CTOC specification files.

Figure 5-1 The Interface flow between BATA Regional CSC and Away agencies



6. Tag Status File – CALTRANS

6.1 File type

Variable length, LF delimited

6.2 File name

YYYYMMDDHHMM.etc

Example: 200304261000.etc
Tag status file created at 10:00 on 04/26/2003
This file will be zipped (200304261000_etc.zip)

6.3 File use

The Tag Status File shall be created by the VECTOR CSC to inform the CALTRANS Host as to the status of each tag associated with an account held by BATA customers and by CTOC agencies. This file shall then be used by the CALTRANS Host to generate a tag status file for the CALTRANS lanes.

6.4 File layout

Each field in the detail structure will be separated with Delimiter "|" pipe.

Table 6-1 Tag status file-header structure

Field Name	Type/Size	Description/Valid Values/Format Type
FILE_NAME	CHAR (50)	The actual filename left padded with spaces
FILLER_1	Char (2)	Spaces
FILE_TIMESTAMP	CHAR (14)	Date file created. Format: YYYYMMDDHHMMSS
RECORD_COUNT	CHAR (10)	Count of all tags in file. Does not include header record. Values 0000000000 – 9999999999
LINEFEED	CHAR (1)	LF
Header Total	**77**	

Table 6-2 tag status file-detail structure

Field Name	Type/Size	Description/Valid Values
ETC_TAG_ID	CHAR (4)	Internal Tag ID Values: 0000 – 1023
ETC_TAG_FAC_CODE	CHAR (6)	The Facility ID Values: 000000-262143
ETC_TAG_STATUS	CHAR (1)	The actual tag status Values: 0-F Refer Table 6-4 for values
LINEFEED	CHAR (1)	LF
Detail Record Total	**12**	

Table 6-3 Tag status file-trailer structure

Field Name	Type/Size	Description/Valid Values/Format Type
RECORD_COUNT	CHAR (10)	Count of all tags in file. Does not include header record. Values 0000000000 – 9999999999
CHECKSUM	CHAR (4)	CRC-CCITT
Trailer Total	**14**	

6.5 Processing requirements

1. The VECTOR CSC shall complete the transmission of the comprehensive tag status file to the CALTRANS Host drop-box as defined in Section 2 of the ICD.
2. In the event that an invalid header record is encountered (e.g., character data in a numeric field, etc.), the CALTRANS Host shall reject the file and notify the VECTOR CSC via the Acknowledgement File defined in Section 9 of this document.
3. In the event that an invalid detail record is encountered (e.g., inappropriate TAG_STATUS, etc.), the CALTRANS Host shall skip the complete file and notify the VECTOR CSC via the Acknowledgement File.
4. The CALTRANS Host shall perform the appropriate sanity checks on the Tag Status File prior to its transmission to the lanes. Such sanity checks should include, but not be limited to:
    - Unusual growth in the number of tags from previous version
    - Unusual change in number of tags with a particular tag status – As per CALTRANS, they will not perform this check, on the Tag Files received from the CSC.
5. One form of validation by the Host could be an upper limit of 10% increase and a lower limit of 2%, as compared to previous file. This check can be lifted on notification from CSC. This can happen if the CSC receives large Tag Inventory. As per the current Business Rules, there is no reason for Tag Status file to decrease in size when compared to previous file. CALTRANS will perform this check on the comprehensive tag file (CALTRANS, GGBD and CTOC agency ranges all merged in one file).
6. The VECTOR CSC would issue tags under more than one tag range under the new set-up. However the VECTOR CSC shall send only a single Tag Status File containing all tags and not separate Tag Status Files for each different facility ranges. The VECTOR CSC shall merge the Away Agency (CTOC) Tag Status file into one file.

Table 6-4 Valid Tag Status Values for CALTRANS Host

Item #	Tag Status	Account Status	Financial Status	Discount Plan	Regional - CSC CALTRANS Tag Status
1	INVENTORY	N/A	N/A	N/A	0
2	RETURNED	N/A	N/A	N/A	0
3	DAMAGED	N/A	N/A	N/A	0
4	RETURNDEF	N/A	N/A	N/A	0
5	SHIPVEND	N/A	N/A	N/A	0
6	TESTED	N/A	N/A	N/A	0
7	EXPIRED	N/A	N/A	N/A	0
8	LOST	Active	N/A	N/A	2
9	STOLEN	Active	N/A	N/A	3
10	ACTIVE	Active	Good Balance	Standard	1
11	ACTIVE	Active	Low Balance (Cash/Check)	Standard	4
12	ACTIVE	Active	Zero Balance (Cash/Check)	Standard	6
13	ACTIVE	Active	Revoked Warning (Cash/Check)	Standard	6
14	ACTIVE	Active	Good Balance	Non Revenue	8
15	ACTIVE	Active	Low Balance (Cash/Check)	Non Revenue	8
16	ACTIVE	Active	Zero Balance (Cash/Check)	Non Revenue	8
17	ACTIVE	Active	Revoked Warning (Cash/Check)	Non Revenue	8
18	N/A	Closed/Closed Pending	N/A	N/A	0

Table 6-5 CTOC Tag Status Mapping Values for CALTRANS Host

Item #	Tag Type	Regional - CSC CALTRANS Tag Status
1	N – Non Revenue (Universal to all entities)	8
2	V – Valid	1
3	I - Invalid	0

6.6 Sample file

200405030305.etc
200405030305.etc20040503030500090001214645
0000|000000|0|
0907|048553|0|
0001|131072|1|
0500|131072|0|
0501|131072|0|
0502|131072|0|
0503|131072|0|
0504|131072|0|
0550|131072|0|
.
.
0182|260469|0|
0183|260469|0|
0184|260469|0|
0185|260469|0|
0186|260469|0|
0187|260469|0|
0188|260469|0|
0189|260469|0|
0190|260469|0|
0191|260469|0|
0192|260469|0|
0193|260469|0|
0194|260469|0|
0195|260469|0|
0196|260469|0|
0197|260469|0|
0198|260469|0|
0199|260469|0|
0200|260469|0|
0201|260469|0|
0202|260469|0|
0203|260469|0|
0204|260469|0|
0205|260469|0|
0206|260469|0|
0207|260469|0|
0208|260469|0|
00012146453423

7. Tag Status File – GGBD

7.1 File type

Variable length, LF delimited

7.2 File name

<AGENCY_CODE>_YYYYMMDD_HHMMSS.etc

Example: gg_200304261_00015.etc
Tag status file created at 10:00:15 on 04/26/2003

This file will be zipped (gg_200304261_00015_etc.zip) and contain the following files –
Example: gg_20030426_100001.etc
at_20030426_100002.etc
srat_20041025_030205.tag
tcat_20030426_100006.tag
cvat_20030426_100009.tag – (Not applicable as this is not a reciprocal agency for tag file transfer.)
sdat_20030426_100013.tag

7.3 File use

The Tag Status File shall be created by the VECTOR CSC to inform the GGBD Host as to the status of each tag associated with an account held by BATA or CTOC customers. This file shall then be used by the GGBD Host to generate a tag status file for the GGBHTD lane.
CSC will generate tag status file for CALTRANS tag range, GGBD tag range separately.
Transmission from CSC to GGBD will include 1 CALTRANS, 1 GGBD, 1 each CTOC Tag File zipped as one file.

7.4 File layout

Each field in the header, detail and trailer structure will be separated with Delimiter "," comma.

Table 7-1 Tag Status File – Header Structure

Field Name	Type/Size	Description/Valid Values

RECORD_TYPE	CHAR (7)	"#HEADER"
FILE_TYPE	CHAR (4)	"TAGS"
ACTION_CODE	CHAR (4)	"INIT"
SEQUENCE #	CHAR (6)	Sequence # of the Tag Status File. This number is incremented every day. Values 000000 – 999999 Sequence Number will be unique per agency file. Sequence number will be incremented every time a new file is generated for home tag ranges. For files received from away agency, the sequence number will be as received.
BUSINESS_DATE	CHAR (10)	File creation date, Format MM/DD/YYYY
SOURCE	CHAR (2)	Indicates the file-creating agency. "at" for BATA (CALTRANS AND GGBD) and corresponding CTOC agency names for the CTOC files.
DESTINATION	CHAR (2)	Indicates the destination entity. "gg" for Golden Gate (for HOME tag files) and "at" for CTOC tag files
CREATE_DATE	CHAR (10)	Indicates the file creation date. Format MM/DD/YYYY
CREATE_TIME	CHAR (8)	Indicates the file creation time. Format HH:MM:SS
LINEFEED	CHAR (1)	LF
Header Total	**54**	

Table 7-2 Tag Status File - Detail Structure

Field Name	Type/Size	Description/Valid Values
ETC_TAG_ID	CHAR (8)	Tag Id in HEX Values: 00000000-0FEFF3FF
ACTION_CODE	CHAR (1)	Always "A"
TAG_TYPE	CHAR (1)	Values N – Non-Revenue, V – Valid, I – Invalid
SUBTYPE_1	CHAR (1)	Values N – Default, L – Lost, S – Stolen, B – Low balance, R – Not Used
SUBTYPE_2	CHAR (1)	N – Not Used
SUBTYPE_3	CHAR (1)	N – Not Used
LINEFEED	CHAR (1)	LF
Record Total	**14**	

Table 7-3 Tag Status File – Trailer Structure

Field Name	Type/Size	Description/Valid Values
RECORD_TYPE	CHAR (8)	"#TRAILER"
SEQUENCE #	CHAR (6)	Same as Header
BUSINESS_DATE	CHAR (10)	File creation date, Format MM/DD/YYYY
DETAIL_COUNT	CHAR (8)	Total count of all detail records
LINEFEED	CHAR (1)	LF
Record Total	**33**	

7.5 Processing requirements

1. The VECTOR CSC shall complete the transmission of the comprehensive tag status file to the GGBD Host drop-box as defined in Section 2 of the ICD.

2. In the event that an invalid header record is encountered (e.g., character data in a numeric field, etc.), the GGBD Host shall reject the file and notify the VECTOR CSC via the Acknowledgement File defined in Section 10 of this document.
3. The RCSC will send one zipped tag status file to GGB. The zipped file will contain seven separate files (AT; GG; TCA; SNDG; SR91; SENTRI and CTV). If any of the seven individual files received are bad, GGB Host will send ACK file to the RCSC with a status of 01. GGB Host will make an attempt to process any of the individual valid files and download to the lanes as per their current processing rules. In the case of a BAD CTOC file, the GGB Host will use their existing mechanism of using the latest CTOC Tag file and ignoring the BAD CTOC file. RCSC will log the problem upon receiving the ACK file (01) from the GGB Host. Upon received notification of an ACK file with a status of 01, the ACS System Admin will log and escalate the issue. They contact the GGB System Admin for detailed information. Once a decision has been reached appropriate action will be taken.
4. In the event that an invalid detail record is encountered (e.g., inappropriate TAG_STATUS, etc.), the GGBD Host shall skip the complete file and notify the VECTOR CSC via the Acknowledgement File. Please refer to Appendix C for processing rules on error data in files.
5. The GGBD Host shall perform the appropriate sanity checks on the Tag Status File prior to its transmission to the lanes. Such sanity checks should include, but not be limited to:
   - Unusual growth in the number of tags from previous version
   - Unusual change in number of tags with a particular tag status
6. One form of validation by the Host could be an upper limit of 10% increase and a lower limit of 2%, as compared to previous file. This check can be lifted on notification from CSC. This can happen if the CSC receives large Tag Inventory. As per the current Business Rules, there is no reason for Tag Status file to decrease in size when compared to previous file. GGBD will perform this check on each individual file (CALTRANS range, GGBD range and on each CTOC agency files).

Table 7-4 Valid Tag Status Values for GGBD Host

Item #	Tag Status	Account Status	Financial Status	Discount Plan	Regional - CSC GGBD Tag Type	Regional - CSC GGBD Sub Type 1
1	INVENTORY	N/A	N/A	N/A	I	N
2	RETURNED	N/A	N/A	N/A	I	N
3	DAMAGED	N/A	N/A	N/A	I	N
4	RETURNDEF	N/A	N/A	N/A	I	N
5	SHIPVEND	N/A	N/A	N/A	I	N
6	TESTED	N/A	N/A	N/A	I	N
7	EXPIRED	N/A	N/A	N/A	I	N
8	LOST	Active	N/A	N/A	I	L
9	STOLEN	Active	N/A	N/A	I	S
10	ACTIVE	Active	Good Balance	Standard	V	N
11	ACTIVE	Active	Low Balance (Cash/Check)	Standard	V	B
12	ACTIVE	Active	Zero Balance (Cash/Check)	Standard	I	B

13	ACTIVE	Active	Revoked Warning (Cash/Check)	Standard	I	B
14	ACTIVE	Active	Good Balance	Non Revenue	N	N
15	ACTIVE	Active	Low Balance (Cash/Check)	Non Revenue	N	N
16	ACTIVE	Active	Zero Balance (Cash/Check)	Non Revenue	N	N
17	ACTIVE	Active	Revoked Warning (Cash/Check)	Non Revenue	N	N
18	N/A	Closed Pending	N/A	N/A	I	N

Table 7-5 CTOC Tag Status Mapping Values for GGBD Host

Item #	CTOC Tag Type	CTOC Sub Type 1	Regional - CSC GGBD Tag Type	Regional - CSC GGBD Sub Type 1
1	N – Non Revenue (Universal to all entities)	N – Not Used	N – Non Revenue	N
2	V – Valid	N – Not Used	V – Valid	N
3	I - Invalid	N – Not Used	I – Invalid	N

7.6 Sample files

CALTRANS Tag File for GGB Lanes

at_20040508_100002.etc

#HEADER,TAGS,INIT,000967,05/08/2004,at,gg,05/08/2004,22:45:03
0FE00001,A,V,N,R,R
0FE00006,A,V,N,R,R
0FE00008,A,V,N,R,R
0FE0000A,A,I,L,R,R
.
.
#TRAILER,000967,05/08/2004,00315464

SR-91 Tag File for GGB Lanes

srat_20041025_030205.tag

#HEADER,TAGS,INIT,000907,05/08/2004,sr,at,05/08/2004,22:45:03
08100000,A,V,N,N,N
08100001,A,V,N,N,N
08100002,A,V,N,N,N
08100003,A,V,N,N,N
.
.
#TRAILER,000907,05/08/2004,00315464

8. ETC Transaction File – CALTRANS

8.1 File type

Variable length, LF delimited

8.2 File name

YYYYMMDDHHMMSSTT.TRE

Example: 2002092804410012.tre
CALTRANS transactions to VECTOR CSC created at 04:41:00.12 on 09/28/02

8.3 File use

The Transaction File shall be created by the CALTRANS Host to inform the VECTOR CSC of all toll transactions occurring at CALTRANS lanes. This file shall contain transactions on CALTRANS lanes due to BATA or CTOC customers having tags with either valid or invalid statuses.(implies this file shall contain both customer violations and regular ETC transactions).
File layout
Each field in the detail structure will be separated with Delimiter "|" pipe.

Table 8-1 ETC Transaction File – Header Structure

Field Name	Type/Size	Description/Valid Values
FILE_NAME	CHAR (50)	RPAD with spaces
CREATE_DATE_TIME	CHAR (22)	Date and Time file created. Format: YYYY-MM-DD HH:MM:SS.TT
RECORD_COUNT	CHAR (10)	Count of all detail records in file. Does not include header record. Values: 0000000000 – 9999999999
LINEFEED	CHAR (1)	LF
Header Total	**83**	

Table 8-2 ETC Transaction File – Detail Structure

Field Name	Type/Size	Description/Valid Values
TOL_MSG_CMD	CHAR (3)	The message command number. This indicates the type of the transaction. Values are: 330 - Valid/tagged ETC trans - Process as regular ETC trx 350 - Unclassified nfv violation.- Not a violation trx. Must be ignored for dates before 07/01 360 - In-lane replenishment trans. - these transactions will never be received 370 - Violation (class 06) collector initiated. - Process as violation unless bit 2 is set. If bit 2 is set the action to take is to discard 400 - untagged violation, class 06 violation, or class mismatch. - Process as violation unless bit 2 is set. If bit 2 is set the action to take is to discard 401 - Class 06 violation. - Process as violation unless bit 2 is set. If bit 2 is set the action to take is to discard 410 - Class mismatch or cancelled. -There are no class mismatch transactions and these trx will be rejected if received 420 - Ticket violation - . - Process as violation unless bit 2 is set. If bit 2 is set the action to take is to discard 430 - Tagged violations- Process as violation unless bit 2 or bit 3 is set. If bit 2 or bit 3 is set the action to take is to discard 440 - Charge transaction type. Class mismatch violation- Process as violation unless bit 2 is set. If bit 2 is set the action to take is to discard 450 - NFV transaction type. Class mismatch or violation if class 06- Process as violation unless bit 2 is set. If bit 2 is set the action to take is to discard 460 - ETC replenishment violation. This is an obsolete command, so the action to take is to discard. 470 - System violation. - Process as violation unless bit 2 is set. If bit 2 is set the action to take is to discard 490 - Hard violation (system). - Process as violation unless bit 2 is set. If bit 2 is set the action to take is to discard 500 - Cash type trans. Class mismatch. -These transactions will never be received. 550 - Convoy Type trans. NFV violation.). - Process as violation unless bit 2 is set. If bit 2 is set the action to take is to discard 570 - Convoy type trans. Violation. -Always treat as violation unless bit 2 is set.
TOL_PLAZA_ID	CHAR (2)	The plaza code of the agency at which the transaction occurred. This information shall be shown on customer statements to indicate the place of occurrence of the transaction. The contents of this field are left justified and padded with trailing blanks as needed. 02 ANTIOCH 03 RICHMOND 04 BAY BRIDGE 05 SAN MATEO 06 DUMBARTON 07 CARQUINEZ 08 BENICIA
TOL_LANE_ID	CHAR (2)	The lane ID at the plaza where the transaction occurred. The information from this field shall be used on customer statements to indicate the point of occurrence of the transaction.
TOL_MSG_TIME	CHAR (22)	The date and time of the occurrence of the transaction at TOL_LANE_ID. Format: YYYY-MM-DD HH:MM:SS.TT. This timestamp information shall be shown on customer statements to indicate the date and time the transaction occurred

Field Name	Type/Size	Description/Valid Values
TOL_COLLECTOR_ID	CHAR (3)	The toll collector ID. The supervisor enters this unique identification number for dedicated lanes. The information from this field shall be used to associate the summary reconciliation records. Values: 000-999. Min length 1 and Max is 3
TOL_MSG_SEQ_NUM	CHAR (6)	The lane controller message sequence number. This field is used for used as part of the key to identify associated cancel file transactions. Min 1 and Max 6. Values: 00000000-99999999
TOL_MSG_STAT	CHAR (2)	The message buffer status flag. This field indicates whether or not a transaction was buffered. Values: 00-FF, Format Hex
TOL_TOUR_ID	CHAR (6)	The tour number for a collector at a given plaza and lane and time. This field indicates a time slice for a given "shift". A shift is composed of multiple tours. This field is alphanumeric LPAD with 0, Format Hex
TOL_FARE_TABLE_NUM	CHAR (3)	This field indicates the fare table that the lane used to calculate the toll. This information originates at the plaza where the plaza indicates the table used for toll computation.
TOL_FARE_AMT	CHAR (5,2)	The toll due as calculated by the CALTRANS Host. This field shall be used to post against regular ETC transactions. Values: 00.00 – 99.99.Possible Values (2.70, 12.50)
TOL_AVC_CLASS_ID	CHAR (2)	The class of the vehicle involved in the transaction. This field shall be used by the VECTOR CSC to determine the class of a violation or a pay-by-plate transaction. Values: 12 – 2 axle vehicle 13 – 3 axle vehicle 14 – 4 axle vehicle 15 – 5 axle vehicle 16 – 6 axle vehicle 17 – 7 axle vehicle 18 – 8 axles or more
TOL_TRD_CNT	CHAR (2)	The treadle counts as determined by the AVC. Values: 00-99
TOL_AVC_TIME	CHAR (22)	The AVC Timestamp. Format: YYYY-MM-DD HH:MM:SS.TT
TOL_FWD_TRD_CNT	CHAR (2)	The forward treadle counts. Values: 00-99
TOL_REV_TRD_CNT	CHAR (2)	The reverse treadle counts. Values: 00-99
TOL_BAD_TRD_CNT	CHAR (2)	The bad treadle counts. Values: 00-99
TOL_REG_CLASS	CHAR (2)	The class of the vehicle as entered by the collector. The collector may not register this class for ETC transactions.

Field Name	Type/Size	Description/Valid Values
TOL_TRANS_FLAG	CHAR (4)	This field is hex encoded value to indicate some attributes of the transaction The contents of this field shall govern certain processing rules for the transaction at the VECTORCSC as indicated below Bit 0 – Vehicle present (rise exit sensor) Bit 1 – Vehicle exit (falling exit sensor) Bit 2 – Deletion/cancel/re-registered flag Bit 3 – AVC Mismatch Bit 4 – Authorization source 0 – System 1 – Plaza Bit 5 – Vehicle exit (falling exit sensor) Bit 6 – Re-register transaction Bit 7 – Reserved for future use Bit 8 – Charge card manual entry Bit 9 – CHP (California Highway Patrol) Flag 0 – Do not send to CHP 1 – Send to CHP Bit 10 – CHP-issued violation 0 – No violation 1 – Violation Bit 11 – Violation detected 0 – No violation 1 – Violation Bit 12 – Transaction is part of convoy Bit 13 – NFV turn around flag 0 – No 1 – Yes Bit 14 – VNP registration Bit 15 – Reserved for future use Values: 0000-FFFF, Format – Hex
TOL_VEH_SEQ_NUMBER	CHAR (6)	The unique vehicle transaction sequence number. The information from this field is used to cancel a transaction Values:000000 – 999999
TOL_TAG_ID	CHAR (4)	This field comprises of the tag ID code and the facility code. i.e. This field consists of the ETC Internal Tag ID and the Issuing Facility Code. Values: 0000-1023
TOL_TAG_FACILITY_ID	CHAR (6)	This field comprises of the Facility code of the Issuing agency Values: 000000-262143
TOL_TAG_BLOCK_A	CHAR (32)	The tag block to which the tag belongs. The contents of this field indicate if a transaction belongs to a CTOC agency. Values: 0000000000000000-FFFFFFFFFFFFFFFF, Format – Hex
TOL_TAG_BLOCK_C	CHAR (32)	Values: 0000000000000000-FFFFFFFFFFFFFFFF, Format – Hex

Field Name	Type/Size	Description/Valid Values
TOL_TAG_TIME	CHAR (22)	The timestamp at which the tag was read at the lane Format: YYYY-MM-DD HH:MM:SS.TT
TOL_TAG_STATUS	CHAR (1)	The status of the tag at the time of the transaction. Values: 0 – F, Format - Hex 0 – Undefined 1 – Good 2 – Lost 3 – Stolen 4 – Low Balance 5 – Zero Balance 6 – Negative Balance 7 – Temporarily disabled 8 – Non-revenue vehicle (NRV) 9- Reserved for future use A - Reserved for future use B - Reserved for future use C - Reserved for future use D - Reserved for future use E - Reserved for future use F – Reserved for future use
TOL_DST_FLAG	CHAR (1)	The daylight savings time. The contents of this field shall be used to govern certain processing rules at the VECTOR CSC 0 = Standard Time, 1 = Daylight Savings time
AGENCY	CHAR (4)	The toll facility from where the transaction originated: Values CALT - CALTRANS
TAG_OWN_AGENCY	CHAR (4)	The tag owning agency due to which the transaction occurred Values: SNDG – San Diego SR91 – SR 91 OTCA – TCA CALT – Caltrans GGBR – Golden Gate Bridge
TRANSACTION_TYPE	CHAR (4)	The contents of this field indicate if the transaction is a home agency (CALTRANS) or an away agency (CTOC) transaction. Values: TOLL – Home Agency ATOL – Away Agency
LINEFEED	CHAR (1)	LF
Detail Record Total	**209**	

Table 8-3 ETC Transaction File – Trailer Structure

Field Name	Type/Size	Description/Valid Values/Format Type
RECORD_COUNT	CHAR (10)	Count of all detail records in file. Does not include header / trailer record. Values 0000000000 – 9999999999
CHECKSUM	CHAR (4)	CRC-CCITT
LINEFEED	CHAR (1)	LF
Trailer Total	**15**	

8.4 Processing requirements

1. Please refer to Appendix D for all transaction-processing rules.
2. The VECTOR CSC shall receive ETC Transaction Files from the CALTRANS Hosts multiple times a day at predetermined intervals (viz. every 0.5hrs, 1hr etc to be determined later).
3. The VECTOR CSC will reconcile all Away Transactions with Expected Revenue and not wait for reconciliation file from Away Agency. However in the event the transactions are rejected by the Away agency due to any reasons, the revenue delta will be reflected through Reports.
4. The VECTOR CSC shall ensure upon processing that the ETC Transaction File does not contain two (or more) transactions for the same TOL_TAG_ID/TOL_TAG_AGENCY_ID combination in the same TOL_PLAZA_ID/TOL_LANE_ID within a one (1) minute period. However, this parameter shall be configurable at the VECTOR CSC based on business rule decisions between the VECTOR CSC and BATA agencies.
5. The VECTOR CSC shall perform sanity checks on the ETC Transaction File to look for formatting errors, record count mismatch between header and detail records etc. In the event the file fails on these sanity checks, the VECTOR CSC shall notify the BATA Host of the anomaly by means of the acknowledgment file.
6. If the VECTOR CSC determines an error in a detail record, the VECTOR CSC shall reject the transaction record with the error and process the remainder of the transaction file and notify the BATA Host of the error via the acknowledgment file. The ACK file shall have a corresponding error code indicative of the error.
7. The VECTOR CSC shall not compute toll amounts for normal ETC transactions (TOL_MSG_CMD = 330). The toll amount calculated at the BATA Host shall be used to post against the BATA accounts. This shall include transactions due to non-revenue customers also (since BATA Host would send 00000 in the field).
8. The CALTRANS Host defaults to class 12 for transactions with less than 2 axles. These transactions shall be processed by VECTOR. The VECTOR CSC shall perform normal processing on the transaction regardless of the contents of Bit 3 in the TOL_TRANS_FLAG field. Class mismatches, on the other hand are different and the CSC shall not process transactions for class mismatches.
9. The VECTOR CSC shall not post transactions to the customer accounts if Bit 2 is set in the TOL_TRANS_FLAG field of the transaction file.

10. VECTOR has the capability of rejecting transaction based on the age of the transaction. VECTOR will set 180 days for all incoming transactions from Away Agency (TCA, SR91 or SNDG) and 365 days for all incoming transactions from Home Agencies (CALTRANS and GGBD). This value can be changed on BATA direction.
11. The CALTRANS Hosts shall not send any in-lane replenishment transactions at this time. (TOL_MSG_CMD=360). The VECTOR CSC shall reject such transactions and notify the BATA Host via the acknowledgment file with an appropriate error code.
12. The VECTOR CSC shall first check its own customer base to see if the transaction can be applied to one of its own accounts before including the transaction in a Transaction File destined for another CTOC agency.
13. CSC that issue tags with multiple Agency IDs shall have all the transactions destined for them included in a single Transaction File and not in a separate Transaction File for each Agency ID.
14. There are no cancel transactions in this file. All cancel transactions shall be in the daily cancel file.
15. CALTRANS Host shall send Toll Amount for all ETC transactions using the current interface. For all Violation transactions the Interface Server will send ETC Toll Amount. No additional field will be required. For any Violation transactions that fail to post against a customer account Vector will compute the Cash Toll Amount using toll fare table provided by CALTRANS. As Toll Fare Table is crucial in determining the Cash Toll Amount, Toll Fare Table will need to be approved by the agency and will be loaded in a controlled fashion into the system. No Automated load is envisioned for Toll Fare Table. For e.g.

    Valid Tag – 2$ (ETC Fare) – (available in the tol_fare_amt field)

    Invalid Tag – 3$ (full cash fare) – (available in the tol_fare_amt field)

    No Tag – 3$ (full cash fare) – (available in the tol_fare_amt field)

    Valid at lane but not postable at CSC – Vector will calculate full cash fare based on fare table.

8.5 Sample file

2004050320475404.tre 2004050320475426000000001000
330|04|17|2004-05-03 13:29:50.84|5|190442|81|00AC48|220|2.0|12|2|2004-05-03
13:29:52.02|2|0|0|00|0003|311209|0419|260271|00000FE2BDA3000000000000000000000|000000000
0000000000000000000000000|2004-05-03 13:29:50.78|1|1|CALT|CALT|TOLL|
330|04|17|2004-05-03 13:31:38.81|5|190451|81|00AC48|220|2.0|12|2|2004-05-03
13:31:40.35|2|0|0|00|0003|311213|0758|260203|00000FE1AEF6000000000000000000000|0000000000
0000000000000000000000000|2004-05-03 13:31:38.78|1|1|CALT|CALT|TOLL|
330|04|17|2004-05-03 13:32:49.04|5|190458|81|00AC48|220|6.25|14|4|2004-05-03
13:32:54.53|4|0|0|00|0003|311220|0554|260145|00000FE0C62A0000000000000000000|0000000000
0000000000000000000000000|2004-05-03 13:32:48.95|1|1|CALT|CALT|TOLL|
00000010005b48

9. ETC Transaction Reconciliation Summary File

9.1 File type

Variable length, LF delimited

9.2 File name

mmddyyyy.rec

Example: 05232005.rec

The daily reconciliation summary file to CALTRANS created at 19:01:10.01 on 04/26/2002 at the VECTOR CSC.

9.3 File use

The VECTOR CSC shall create a transaction reconciliation summary file back to the BATA Host by business date indicating the transactions within different tours.

9.4 File layout

Each field in the detail structure will be separated with Delimiter "|" pipe.

Figure 9-1 ETC Transaction Reconciliation Summary File – Header Structure

Field Name	Type/Size	Description/Valid Values
FILE_NAME	CHAR (50)	RPAD with spaces
TIMESTAMP	CHAR (16)	Date file created. Format: YYYYMMDDHHMMSSTT
RECORD_COUNT	CHAR (10)	Count of all detail records in file. Does not include header record. Values: 0000000000 – 9999999999
LINEFEED	CHAR (1)	LF
Header Total	**77**	

Figure 9-2 ETC Transaction Reconciliation Summary File – Detail Structure

Field Name	Type/Size	Description/Valid Values
BUSINESS_DATE	CHAR (10)	The business day of the tours Format: MM/DD/YYYY
PLAZA_ID	CHAR (2)	The Plaza ID. This field is part of the unique identifier used to relate the corresponding business day file records. Values: 00 - 99
COLLECTOR_ID	CHAR (3)	The collector ID. This field is part of the unique identifier used to relate the corresponding business day file records Values: 000-999, Min = 1, Max = 3
TOUR_ID	CHAR (6)	The Tour ID used to identify a tour for a collector at the lane. This field is part of the unique identifier used to relate the corresponding business day file records. Format – Hex
LANE_ID	CHAR (2)	The Lane ID for the collector for a given business day for a given Plaza Values: 00 – 99
REV_ETC_COUNT	CHAR (10)	The number of revenue ETC transactions for a given Tour ID. The actual number of revenue transactions processed at the CSC inclusive of the CTOC customer transactions. Values: 0000000000-2147483647
ETC_REVENUE	CHAR (10,2)	The actual amounts posted against all ETC transactions for home agency accounts. This field shall indicate expected amounts for transactions sent to CTOC agencies at this time. Values 0000000.00 - 9999999.99
NONREV_ETC_COUNT	CHAR (10)	The number of transactions due to non-revenue customers on the CALTRANS lanes.
ETC_REPLENISH_COUNT	CHAR (10)	The number of transactions due to in-lane replenishments. The VECTOR CSC will ignore this field, as this feature is not supported.
ETC_REPLENISH_AMOUNT	CHAR (10,2)	The number of transactions due to in-lane replenishments. The VECTOR CSC will ignore this field, as this feature is not supported. Values 0000000.00 - 9999999.99
AVC_CLASS_ID	CHAR (2)	The vehicle classification as determined by the AVC equipment. Values 00 – 99
AGENCY	CHAR (4)	The will be populated from the values indicated in the AGENCY (tag owning agency) field in the Business Day Summary file. Values: SNDG – San Diego SR91 – SR 91 OTCA – TCA CALT – CALTRANS GGBR – Golden Gate Bridge District
REV_ETC_EXCEPT_COUNT	CHAR (10)	The number of revenue transactions that were rejected as exceptions either during pre-processing or at the time of posting. Values: 0000000000 – 2147483647
ETC_EXCEPT_AMOUNT	CHAR (10,2)	The amount associated with the revenue transactions rejected in REV_ETC_EXCEPT_COUNT field. Values 0000000.00 - 9999999.99
NON_REV_ETC_EXCEPT_COUNT	CHAR (10)	The number of transactions rejected as exceptions due to non-revenue accounts either during pre-processing or at the time of posting. Values: 0000000000 – 2147483647
REPLN_EXCEPT_COUNT	CHAR (10)	The number of in-lane replenishment transactions rejected. The VECTOR CSC will ignore this field, as this feature is not supported.
REPLN_EXCEPT_AMOUNT	CHAR (10,2)	The actual amounts due to in-lane replenishments. The VECTOR CSC will ignore this field, as this feature is not supported. Values 0000000.00 - 9999999.99

Field Name	Type/Size	Description/Valid Values
OTHER_EXCEPT_ COUNT	CHAR (10)	The number of exception transactions that are neither ETC exceptions nor replenishment exceptions Values: 0000000000 – 2147483647
OTHER_EXCEPT_ AMOUNT	CHAR (10,2)	The amount associated with the rejected transactions in OTHER_EXCEPT_COUNT field. Values 0000000.00 - 9999999.99
LINEFEED	CHAR (1)	LF
Record Total	**150**	

Figure 9-3 ETC Transaction Reconciliation Summary File – Trailer Structure

Field Name	Type/Size	Description/Valid Values/Format Type
RECORD_COUNT	CHAR (10)	Count of all detail records in file. Does not include header / trailer record. Values 0000000000 – 9999999999
CHECKSUM	CHAR (4)	CRC-CCITT
Trailer Total	**14**	

9.5 Processing requirements

1. The VECTOR CSC shall generate one daily summary reconciliation file within the tours indicated by the corresponding Business Day File. This file shall include only regular ETC transactions. Transactions that the lane may indicate as violations and those converted, as pay-by-plate transactions are not reported in this scheme.
2. The VECTOR CSC shall create one summary record per plaza, lane, tour, collector and AVC Class.
3. The counts in this file may not match the corresponding count in the Business Day File, however the count of all transactions for each tour, as indicated in all fields, should be the same.
4. The transactions that are not posted due to exceptions shall be combined with those that fail the sanity checks during pre-processing to form a single exception summary record for a given plaza, lane, tour, collector and AVC Class.

9.6 Sample file

04272004.rec 20040503043007000000002074
04/27/2004|02|127|0135D1|01|2|4.00|0|0|0.00|12|CALT|0|0.00|0|0|0.00|0|0.00|
04/27/2004|02|127|0135D5|01|0|0.00|0|0|0.00|00|CALT|0|0.00|0|0|0.00|0|0.00|
04/27/2004|02|128|0135D3|01|0|0.00|0|0|0.00|00|CALT|0|0.00|0|0|0.00|0|0.00|
04/27/2004|02|127|0135D9|01|0|0.00|0|0|0.00|00|CALT|0|0.00|0|0|0.00|0|0.00|
00000020745299

10. Acknowledgement File

10.1 File type

Fixed length, LF delimited

10.2 File name

{FROM_AGENCY}_{FILE_NAME}_{FILE_TYPE}. ack

Example: GGB_2001120104101501_ETC.ack
Acknowledgement file from Golden Gate Bridge created in response to the VECTOR CSC tag status file created at 04:10:15.01 on 12/01/2001

10.3 File use

The Acknowledgment File shall be created by the receiving system (the VECTOR CSC or the BATA Hosts whosoever received the file) to inform the transmitting system (the VECTOR CSC or the BATA Hosts whosoever transmitted the file) that the file transmitted was received in its entirety.

An Acknowledgement File shall be sent for each of the previously referenced files. Please refer to table 1.1 for identification of files, which will receive an .ack.

10.4 File layout

Figure 10-1 Acknowledgment File - Detail Structure

Field Name	Type/Size	Description/Valid Values
FILE_TYPE	CHAR (4)	ACK
FROM_AGENCY_ID	CHAR (3)	Standard code of the system that received the file referenced in ORIG_FILE_NAME_TYPE. Values: CSC – indicates VECTOR CSC GGB – indicates Golden Gate Bridge Host CAL – indicates CALTRANS Host
TO_AGENCY_ID	CHAR (3)	Standard agency ID code of the system that transmitted the file referenced in ORIG_FILE_NAME_TYPE. Values: CSC – indicates VECTOR CSC GGB – indicates Golden Gate Bridge Host CAL – indicates CALTRANS Host

Field Name	Type/Size	Description/Valid Values
ORIG_FILE_NAME_TYPE	CHAR (50)	The name and type of the file being acknowledged as received from the To Agency. Format: FILE_NAME.FILE_TYPE where FILE_NAME is the name of the file being acknowledged and FILE_TYPE is the type of the file being acknowledged.
FILE_DATE	CHAR (8)	Date ACK file created. Format: YYYYMMDD The system receiving this acknowledgment file shall use this as the acknowledgement date.
FILE_TIME	CHAR (6)	Time ACK file created. Format: HHMMSS This system receiving this acknowledgment file shall use this as the acknowledgement time.
RETURN_CODE	CHAR (2)	A code indicating the status of the file being acknowledged. Values: 00 – File was successfully received and verified. 01 – Header record count does not match the number of detail records found in the file/record size in received file is not consistent with the ICD Refer to Appendix C for the processing rules associated with the various RETURN_CODE values.
DELIMITER	CHAR (1)	LF
Detail Total	**77**	

10.5 Processing requirements

1. This file shall contain a single record only. For each file received by the From Agency/CSC, the From Agency/CSC shall generate an Acknowledgement File and transmit the file back to the To Agency/CSC. Refer to Table 1.1 for a list of files, which will be 'acked'.
2. CSC loads the ACK files into the database. This table is queried daily by production support. Error in ACK files will be recognized and escalated to production support for research and resolution. For example, if an ACK reject reason is received indicating the file is out of balance, this will initiate the research to correct the problem.
3. The ACK file indicates that a file was successfully received by the receiving agency. The ACK provides an audit trail for research and can be used as a key event, in the future, in the Regional CSC. The Regional CSC is not designed to recognize the receipt of an ACK file for the continuation of an operation (i.e. CTOC Invoicing).
4. All incoming files that fail file-sanity checks (like header record count does not match the trailer record/ record length in file, does not match the ICD/ invalid checksum for CALTRANS) shall be rejected with reject code 01.
5. Records received, in transaction files, where the data elements are inconsistent with the ICD (like invalid date/invalid plaza_id/invalid lane) shall be acked with a code of 00, if the file passed the sanity check, as mentioned in #4. These individual records shall have reject codes in the response file going back to GGBD.
6. All file coming into ACS CSC will be rejected based on the ack return codes as described in Appendix C. Refer to Appendix C for the various processing rules related to each RETURN_CODE value.

11. ETC Monthly Transaction Reconciliation Summary File

11.1 File type

Variable length, LF delimited

11.2 File name

{MMYYYY}. RECA

Example: 022002.reca

The monthly transaction reconciliation file generated by the VECTOR CSC for transactions generated at the CALTRANS lanes during the month of February 2002.

11.3 File use

The monthly transaction reconciliation summary file shall be created by the VECTOR CSC to provide transaction summary information to the CALTRANS Host. The CALTRANS Host shall then use the information from this file to populate the financial reports.

11.4 File layout

Each field in the detail structure will be separated with Delimiter "|" pipe.

Figure 11-1 ETC Monthly Transaction Reconciliation Summary File – Header Structure

Field Name	Type/Size	Description/Valid Values
FILE_NAME	CHAR (50)	RPAD with spaces
TIMESTAMP	CHAR (22)	Date file created. Format: YYYY-MM-DD HH:MM:SS.TT
RECORD_COUNT	CHAR (10)	Count of all detail records in file. Does not include header record. Values: 0000000000 – 9999999999
LINEFEED	CHAR (1)	LF
Header Total	**83**	

Figure 11-2 ETC Monthly Transaction Reconciliation Summary File – Detail Structure

Field Name	Type/Size	Description/Valid Values
PLAZA_ID	CHAR (2)	The Plaza ID where the transaction occurred. Values: 00 – 99
REVENUE_MONTH	CHAR (6)	The month for which revenue information is being generated Format: MMYYYY where YYYY = year and MM = month
AGENCY_ID	CHAR (4)	Values = CALT = SNDG = SR91 = OTCA = GGBR
FARE_TBL	CHAR (3)	The fare table information based on which the tolls were calculated and the revenue is generated. Values: 001- 999
CLASS_ID	CHAR (2)	The vehicle class based on which revenue information is generated. Values: 00 – 99
TOL_ADJ_CNT	CHAR (5)	Number of normal and violation toll adjustments made against customer accounts during the month. Values: 00000 – 99999
TOL_ADJ_AMT	CHAR (10,2)	The consolidated amount corresponding to the number of normal and violation toll adjustments made against customer accounts during the month. Values: 0000000.00 – 9999999.99
TOL_ADJ_REV_CNT	CHAR (5)	The number of normal and violation toll adjustment transactions that were reversed against customer accounts during the month. Values: 00000 – 99999
TOL_ADJ_REV_AMT	CHAR (10,2)	The consolidated amount corresponding to the number of reversals against customer account adjustments during the month. Values: 0000000.00 – 9999999.99
ETC_REV_CNT	CHAR (5)	The number of toll transaction reversals against customer accounts during the month. Values: -9999 – 00000
ETC_REV_AMT	CHAR (10,2)	The consolidated amount associated with the number of toll transaction reversals during the month. Values: (-999999.99 – 0000000.00)
VTOL_CNT	CHAR (5)	The number of violations that were converted to tolls during the month. Values: 00000 – 99999
VTOL_AMT	CHAR (10,2)	The revenue associated with the conversion of violation transactions to toll transactions. Values: 0000000.00 – 9999999.99
VTOL_REV_CNT	CHAR (5)	The number of VTOL reversals processed during the month. Values: -9999 – 00000
VTOL_REV_AMT	CHAR (10,2)	The revenue associated with the VTOL reversals processed during the month. Values: (-999999.99 – 0000000.00)
REPLN_EXCEPT_CNT	CHAR (5)	The number of in-lane replenishment exceptions processed during the month. The VECTOR CSC shall default to zero since this field is not used currently. Values: 00000 – 99999
REPLN_EXCEPT_AMT	CHAR (10,2)	The amount associated with the in-lane replenishment exceptions processed during the month. The VECTOR CSC shall default to zero since this field is not used currently. Values: 0000000.00 – 9999999.99
VIO_TOL_PAY_CNT	CHAR (5)	The number of violation/citation payments received during the month. Values: 00000 – 99999
VIO_TOL_PAY_AMT	CHAR (10,2)	The amount associated with the violation/citation payments processed during the month. Values: 0000000.00 – 9999999.99

Field Name	Type/Size	Description/Valid Values
VIO_TOL_PAY_REV_CNT	CHAR (5)	The number of violation/citation payment reversals processed during the month. Values: -9999 – 00000
VIO_TOL_PAY_REV_AMT	CHAR (10,2)	The amount associated with the violation/citation payment reversals processed during the month. Values: (-999999.99 – 0000000.00)
MISC_CNT	CHAR (5)	Reserved for future use. Values: 00000
MISC_AMT	CHAR (10,2)	Reserved for future use. Values: 0000000.00 – 9999999.99
Record Total	**152**	

Figure 11-3 ETC Monthly Transaction Reconciliation Summary File – Trailer Structure

Field Name	Type/Size	Description/Valid Values/Format Type
RECORD_COUNT	CHAR (10)	Count of all detail records in file. Does not include header / trailer record. Values 0000000000 – 9999999999
CHECKSUM	CHAR (4)	CRC-CCITT
Trailer Total	**14**	

11.5 Processing requirements

1. The VECTOR CSC shall create a monthly reconciliation file back to the CALTRANS Host to report the revenue that is not reported through the daily reconciliation file transfers.
2. The VECTOR CSC shall generate this file for the business month only upon successful processing of all the business day files for that month.
3. The monthly reconciliation summary file shall contain a summary of the revenue information by plaza, fare table, class and revenue month.
4. The revenue reported in this file shall include revenue from ETC toll adjustments and toll adjustment reversals against lane transactions that were performed during the month.
5. ETC Transaction reversals performed at the VECTOR CSC shall be included in this file.
6. The VECTOR CSC shall include revenue from violation transactions converted to VTOLs. Any adjustments made to such VTOL transactions shall be reported in this file.
7. The CALTRANS Host currently does not support in-lane replenishments and hence the VECTOR CSC shall not include any in-lane replenishments in this file. The VECTOR CSC shall default the value in the fields that correspond to the in-lane replenishments to zero.
8. The VECTOR CSC shall not report any information from **.can** files. The VECTOR CSC also shall report the transaction adjustments at a summary level in this file. Bulk adjustments made against ETC accounts shall not appear in this file.
9. The VECTOR CSC shall use the actual class (i.e. the class received in the transaction file) to report the revenue information in this file.

11.6 Sample file

```
102001.reca                    20020125063337000000000035
06|102001|CALT|203|12|0|0.00|0|0.00|-3|-5.55|2710|5013.50|0|0.00|0|0.00|1189|2378.00|-1|-2.00|0|0.00|
08|102001|CALT|203|12|0|0.00|0|0.00|0|0.00|14429|26693.65|-2|-3.70|0|0.00|2067|4134.00|-11|-22.00|0|0.00|
04|102001|CALT|203|12|0|0.00|0|0.00|-2|-3.70|43973|81365.15|-1|-1.85|0|0.00|2048|4096.00|-13|-26.00|0|0.00|
03|102001|CALT|203|12|0|0.00|0|0.00|0|0.00|9133|16896.05|0|0.00|0|0.00|1683|3364.00|-9|-18.00|0|0.00|
07|102001|CALT|203|12|0|0.00|0|0.00|-2|-3.70|17161|31747.85|-16|-29.60|0|0.00|1944|3887.00|-7|-14.00|0|0.00|
02|102001|CALT|203|12|0|0.00|0|0.00|0|0.00|830|1535.50|0|0.00|0|0.00|261|522.00|-1|-2.00|0|0.00|
0000000035700e
```

12. Cancellation File

12.1 File type

Variable length, LF delimited

12.2 File name

{MMDDYYYY}. CAN

Example: 10262003.CAN

Cancellation file from CALTRANS Host created for the VECTOR CSC on 10/26/20

12.3 File use

The CALTRANS Host shall create a cancellation file to the VECTOR CSC to inform the CSC about the transactions that need to be reversed on the VECTOR CSC. These transactions shall not be included in the daily reconciliation files or the monthly reconciliation files sent to the CALTRANS Host from the VECTOR CSC. This file may contain various types of transactions, including those that may not apply to the CSC

12.4 File layout

Each field in the detail structure will be separated with Delimiter "|" pipe.

Figure 12-1 Cancellation File – Header Structure

Field Name	Type/Size	Description/Valid Values
FILE_NAME	CHAR (50)	RPAD with spaces
TIMESTAMP	CHAR (22)	Date file created. Format: YYYY-MM-DD HH:MM:SS.TT
RECORD_COUNT	CHAR (10)	Count of all detail records in file. Does not include header record. Values: 0000000000 – 9999999999
LINEFEED	CHAR (1)	LF
Header Total	**83**	

Figure 12-2 Cancellation File – Detail Structure

Field Name	Type/Size	Description/Valid Values
BUSINESS_DATE	CHAR (10)	The business day assigned to the transaction. Format: MM/DD/YYYY – MM –month of the transaction. DD – date of the transaction. YYYY – year of the transaction.
PLAZA_ID	CHAR (2)	The Plaza ID for the transaction .Values: 00 – 99
COLLECTOR_ID	CHAR (3)	The Collector ID involved in the transaction. Values: 000 – 999
TOUR_ID	CHAR (6)	The Tour ID for the collector's shift. This is part of the unique key required to identify a transaction in a file. Format – Hex
LANE_ID	CHAR (2)	The Lane ID where the transaction occurred. This is part of the unique key to identify a transaction to be reversed. Values: 00 – 99
TRANSACTION_TYPE	CHAR (3)	The type of the transaction. This identifies whether the transaction to be cancelled is a regular ETC transaction or a violation transaction. Values: 000 – 999
TOLL_MSG_SEQ_NUM	CHAR (6)	The lane controller message sequence number. This field is used for used as part of the key to identify associated cancel file transactions. Min 1 and Max 6. Values: 000000-999999
VEHICLE_SEQ_NO	CHAR (6)	The vehicle sequence number. This is part of the unique key required to identify the transaction to be cancelled. Values: 00000000 – 99999999
TRANSACTION_TIME	CHAR (22)	The timestamp for the transaction. This is part of the unique key required to identify the transaction to be cancelled. Format: YYYY-MM-DD HH:MM:SS.TT
LINEFEED	CHAR (1)	LF
Detail Total	**61**	

Figure 12-3 Cancellation File – Trailer Structure

Field Name	Type/Size	Description/Valid Values/Format Type
RECORD_COUNT	CHAR (10)	Count of all detail records in file. Does not include header / trailer record. Values 0000000000 – 9999999999
CHECKSUM	CHAR (4)	CRC-CCITT
LINEFEED	CHAR (1)	LF
Trailer Total	**15**	

12.5 Processing requirements

1. The CALTRANS Host shall send one file daily to the VECTOR CSC containing transactions that need to be cancelled or ignored at the CSC. This file shall be received and processed at the VECTOR CSC before the business day file is processed.
2. The contents of this file shall not be included as part of the daily reconciliation back to the CALTRANS Host.
3. The VECTOR CSC shall not wait for a cancel file in order to send transaction files to the CTOC agencies. The transaction files to the CTOC agencies shall be made available as per the timeline described in the CTOC Spec Rev G4

4. In exception cases, where the cancel record, for a previous day transaction was received the next day, Vector CSC shall not be able to cancel these transactions, as the original transaction would have already been sent to CTOC agencies. These transactions shall be rejected with the appropriate return code in the ack file.
5. The CALTRANS Host shall send an empty file with no records in the event there are no cancellations on a particular day.
6. The VECTOR CSC shall not show these cancelled transactions on customer statements.
7. The VECTOR CSC shall use the unique identifiers – Plaza ID, Lane ID, Collector ID, Tour ID, vehicle sequence number and time of the transaction to determine the exact transaction to be cancelled.

12.6 Sample file

```
05012004.can                    20040503064127740000000034
05/01/2004|04|11|008E24|14|370|509586|178772|2004-05-01 13:38:48.70 |
05/01/2004|04|35|008479|02|330|203302|772344|2004-05-01 15:37:12.77 |
05/01/2004|04|41|00876F|20|370|581375|953780|2004-05-01 08:39:26.17 |
05/01/2004|04|41|008771|20|330|582515|954759|2004-05-01 11:28:48.18 |
05/01/2004|04|41|008771|20|370|582018|954309|2004-05-01 10:37:15.99 |
0000000034FD3F
```

13. ETC Business Day Summary File

13.1 File type

Variable length, LF delimited

13.2 File name

{MMDDYYYY}. ADT

Example: 02202002.adt
The CALTRANS Host generated a business day summary file for the VECTOR CSC on 02/20/2002.

13.3 File use

The CALTRANS Host generates a business day summary of transactions for the VECTOR CSC to assign the right business day to the transactions. The contents of this file are then used by the VECTOR CSC to reconcile the transaction information back to the CALTRANS Host. The CALTRANS Host generates the financial reports using this information.

13.4 File layout

Each field in the detail structure will be separated with Delimiter "|" pipe.

Figure 13-1 ETC Business Day Summary File – Header Structure

Field Name	Type/Size	Description/Valid Values
FILE_NAME	CHAR (50)	RPAD with spaces
TIMESTAMP	CHAR (22)	Date file created. Format: YYYYMMDDHHMMSSTT
RECORD_COUNT	CHAR (10)	Count of all detail records in file. Does not include header record. Values: 0000000000 – 9999999999
LINEFEED	CHAR (1)	LF
Header Total	**83**	

Figure 13-2 ETC Business Day Summary File – Detail Structure

Field Name	Type/Size	Description/Valid Values
BUSINESS_DATE	CHAR (10)	The business date for the various tours/shifts.
PLAZA_ID	CHAR (2)	The Plaza ID where the transaction occurred. Values: 00 – 99
COLLECTOR_ID	CHAR (3)	The Collector ID involved in the transaction. Values: 001- 999
TOUR_ID	CHAR (6)	The Tour ID for the collector's shift. This is part of the unique key required to identify a transaction in a file. Format - HEX
LANE_ID	CHAR (2)	The Lane ID where the transaction occurred. This is part of the unique key to identify a transaction to be reversed. Values: 00 – 99
AGENCY	CHAR (4)	Tag owning agency. The summary records (.rec/reca files) will be created from the values indicated in this fileld. Values = CALT = SNDG = SR91 = OTCA = GGBR
FARE_TBL_NUM	CHAR (3)	Current value of the fare table. Current value = 250 If fare change a new fare table with different fare table number will be loaded at lanes.
CLASS_ID	CHAR (2)	AVC Class Id or Collector Class . Values 00 – 99
ETC_REV_COUNT	CHAR (10)	The number of revenue ETC transactions in the tour. Values: 0000000000 – 2147483647
ETC_NONREV_COUNT	CHAR (10)	The number of non-revenue ETC transactions in the tour. Values: 0000000000 – 2147483647
REPLN_COUNT	CHAR (10)	The number of replenishment counts in the tour. Values: 0000000000 – 2147483647
SYS_VIOL_COUNT	CHAR (10)	The number of transactions that the AVC determined as violations in the tour. Values: 0000000000 – 2147483647
REG_VIOL_COUNT	CHAR (10)	The number of registered violations in the tour. This is the count of violations as indicated by a toll collector. Values: 0000000000 –2147483647
ETC_REV_AMOUNT	CHAR (9,2)	Amount Expected. Values: 000000.00 – 999999.99
SYS_VIOL_AMOUNT	CHAR (9,2)	Amount corresponding to SYS_VIOL_COUNT. Values: 000000.00 – 999999.99
REG_VIOL_AMOUNT	CHAR (9,2)	Amount corresponding to REG_VIOL_COUNT. Values: 000000.00 – 999999.99
MISC01_COUNT	CHAR (10)	Reserved for future use. This field may be used to indicate other types of counts to the VECTOR CSC. Values: 0000000000 – 2147483647

Field Name	Type/Size	Description/Valid Values
MIS02_COUNT	CHAR (10)	Reserved for future use. This field may be used to indicate other types of counts to the VECTOR CSC. Values: 0000000000 – 2147483647
LINEFEED	CHAR (1)	LF
Record Total	**130**	

Figure 13-3 ETC Business Day Summary File – Trailer Structure

Field Name	Type/Size	Description/Valid Values/Format Type
RECORD_COUNT	CHAR (10)	Count of all detail records in file. Does not include header / trailer record. Values 0000000000 – 9999999999
CHECKSUM	CHAR (4)	CRC-CCITT
LINEFEED	CHAR (1)	LF
Trailer Total	**15**	

13.5 Processing requirements

1. The VECTOR CSC shall process the business day summary file everyday only upon successful processing of the cancel files for the day.
2. Each business day file shall contain one unique business day, which shall represent tour _id mappings for the current day. If any other business day is encountered in the file, then the file shall be rejected in its entirety with the appropriate return code in the ack file.
3. The VECTOR CSC shall use the information from this file to assign business dates to transactions received at the CSC before. This implies that the transactions processed before on the CSC shall be tagged with the right business day only upon receipt and processing of this file.
4. The VECTOR CSC shall compare the Tour ID and Lane ID from the ETC Transaction File with the Tour ID and Lane ID from the business day file to assign the appropriate business day for the transaction.
5. The VECTOR CSC shall also hold all transactions meant for CTOC agencies until this file is processed successfully.
6. The VECTOR CSC shall validate all the fields in the file for acceptable values. However the values in the SYS_VIOL_COUNT and REG_VIOL_COUNT are sent to the CSC only as threshold numbers. The counts in this file enable to check the variance between counts at the VPC and the CSC.
7. The CALTRANS Host expects the reconciliation to match only for the ETC transactions.
8. The CALTRANS Host shall default to a value of zero (0) in the REPLN_COUNT field since in-lane replenishments are not supported currently.
9. The VECTOR CSC shall generate an acknowledgment file back to the CALTRANS Host to indicate the status after processing of the business day summary file.
10. The VECTOR CSC shall not generate any daily business day reconciliation file (.rec) back to the CALTRANS Host until all transactions accounted for in the corresponding business day summary file have been received at the CSC.

11. The business day is not deemed “closed” until all the transactions from the file are accounted for at the VECTOR CSC.

13.6 Sample file

```
05012004.adt                    20040503064127170000001712
05/01/2004|02|127|01369A|01|CALT|220|12|1|0|0|0|0|000002.00|000000.00|000000.00|0|0|
05/01/2004|02|132|01369C|01|CALT|220|15|0|0|0|0|2|000000.00|000000.00|000018.50|0|0|
05/01/2004|02|127|00FF43|02|CALT|220|12|2|0|0|0|0|000004.00|000000.00|000000.00|0|0|
05/01/2004|02|132|013698|01|CALT|220|00|0|0|0|0|0|000000.00|000000.00|000000.00|0|0|
05/01/2004|02|191|003B46|03|CALT|220|12|42|1|0|9|0|000084.00|000018.00|000000.00|0|0|
05/01/2004|02|191|003B46|03|CALT|220|14|1|0|0|0|0|000006.25|000000.00|000000.00|0|0|
05/01/2004|02|191|003B46|03|CALT|220|15|5|0|0|4|0|000046.25|000037.00|000000.00|0|0|
05/01/2004|08|523|0133A0|03|CALT|220|00|0|0|0|0|0|000000.00|000000.00|000000.00|0|0|
000000171223C3
```

14. ETC Transaction File – GGBD

14.1 File type

Variable length, LF delimited

14.2 File name

YYYYMMDDHHMMSS.REQ

Example: 20020928044100.req
GGBD transactions to VECTOR CSC created at 04:41:00 on 09/28/02

14.3 File use

The Transaction File shall be created by the GGBD Host to inform the VECTOR CSC of all toll transactions occurring at CALTRANS lanes. This file shall contain tagged transactions on GGBD lanes due to BATA customers or CTOC customers with both valid and invalid statuses.

14.4 File layout

Each field in the header, detail and trailer structure will be separated with Delimiter "," comma.

Figure 14-1 ETC Transaction File – Header Structure

Field Name	Type/Size	Description/Valid Values
RECORD_TYPE	CHAR (7)	"#HEADER"
FILE_TYPE	CHAR (4)	"REQ "
SEQUENCE #	CHAR (6)	Sequence # of the Transaction File. This unique number is incremented for every file. Values 000000 – 999999
BUSINESS_DATE	CHAR (10)	This field will be populated with the transaction date of the first transaction in the file. Format MM/DD/YYYY
SOURCE	CHAR (2)	Indicates the file-creating agency. "GG" for Golden Gate
DESTINATION	CHAR (2)	Indicates the destination entity. "AT" for BATA
CREATE_DATE	CHAR (10)	Indicates the file creation date. Format MM/DD/YYYY
CREATE_TIME	CHAR (8)	Indicates the file creation time. Format HH:MM:SS

LINEFEED	CHAR (1)	LF
Header Total	**50**	

Figure 14-2 ETC Transaction File – Detail Structure

Field Name	Type/Size	Description/Valid Values
TRANSACTION_NUMBER	CHAR (10)	Unique transaction number for each ETC transaction. Used to identify the transaction in the ETC reconciliation process. Values 0000000000 to 9999999999
TOL_TRX_TYPE	CHAR (1)	Type of transaction. 1 – ETC. 3 – Request Status
TOL_TAG_ID	CHAR (4)	This field consists of the ETC Internal Tag ID, in accordance with Title-21 specs. Values: 0000-1023
TOL_TAG_FACILITY_ID	CHAR (6)	This field comprises of the Facility code of the Issuing agency. Values: 000000-262143
TOL_PLAZA_ID	CHAR (3)	The plaza code of the agency at which the transaction occurred. This information shall be shown on customer statements to indicate the place of occurrence of the transaction. Value = "GGB"
TOL_LANE_ID	CHAR (2)	The lane ID at the plaza where the transaction occurred. The information from this field shall be used on customer statements to indicate the point of occurrence of the transaction. Values = 00 – 99.
TOL_TRX_DATE	CHAR (10)	The date of the occurrence of the transaction at TOL_LANE_ID. Format: MM/DD/YYYY. This toll transaction date information shall be shown on customer statements.
TOL_TRX_TIME	CHAR (8)	The time of the occurrence of the transaction at TOL_LANE_ID. Format: HH:MM:SS. This toll transaction time information shall be shown on customer statements.
TOL_FARE_ETC_AMT	CHAR (5,2)	The toll due as calculated by the GGBD Lane / Host. This is the amount to be posted to the ETC home or away account, posting by Tag or Plate. Values: 00000 ($000.00) – 99999 ($999.99)
TOL_FARE_CASH_AMT	CHAR (5,2)	The toll due as calculated by the GGBD Lane / Host. Values: Always 00000
TOL_MSG_FLAG	CHAR (2)	The message buffer status flag. This field indicates whether or not a transaction was buffered. Values: 00-99. 1 – Toll packet transaction. 2 – Buffered tag transaction
TOL_AVC_CLASS	CHAR (2)	The class of the vehicle involved in the transaction. This field shall contain AVC class or as overridden by the collector classification. Values: Default 02
LANE_TX_SEQUENCE_NUMBER	CHAR (8)	The unique vehicle transaction sequence number generated by lane (Lane sequence number). Values:00000000 – 99999999

Field Name	Type/Size	Description/Valid Values
TOL_TAG_STATUS	CHAR (1)	The status of the tag at the time of the transaction. Values: 0 – 9 0 - Invalid 1 – Good 2 – Lost 3 – Stolen 4 – Low Balance 8 – Non-revenue vehicle (NRV)
TOL_DST_FLAG	CHAR (1)	The daylight savings time. The contents of this field shall be used to govern certain processing rules at the VECTOR CSC This field will always default to asterisk (*)
TOL_TRX_SPEED	CHAR (3)	The transaction speed as reported by the lane. Values 000 – 999
VIOL_NUMBER/ORIG_TRX_NUMBER	CHAR (10)	For an ETC transaction that is also a violation, this is the unique violation number. For a violation transaction, this will hold the original transaction number. For ETC transactions this field will contain 0000000000
RESOLV_CODE	CHAR (2)	For ETC transactions this field will contain 00 The code established for a violation transaction following ETC posting and review audit review. CSC will process only code '02' violations. If ACS receives revenue audit reject transactions from GGBD (field indicator RESOLVE_CODE will be used) the transaction will reconciled back to GGBD as Authority reject status (92). The codes the CSC will receive are: 02 – violation that needs to be processed at the CSC All the following are write-off codes, except 98 which is an ETC violation that was paid via the ETC Interface 90 – equipment problems 91 – when light curtain breaks, and this violation is a trailer 92 – miscellaneous write-off – documented and tracked by Revenue Audit 93 – vehicle backed up 94 – non revenue violator/CHP as documented by Bridge Officer during tour 95 – late commit carpool as documented by Bridge Officer during tour 96 – late commit cash paid as documented by Bridge Officer during tour 97 – late commit handicap, or disabled card that did not read as document by Bridge Officer 98- Paid on Import (via the ETC Interface) 99 – miscellaneous write-off – reported by Bridge Officer, documented and tracked by Revenue Audit
LINEFEED	CHAR (1)	LF
Detail Record Total	**84**	

Figure 14-3 ETC Transaction File – Trailer Structure

Field Name	Type/Size	Description/Valid Values
RECORD_TYPE	CHAR (8)	"#TRAILER"
SEQUENCE #	CHAR (6)	Same as Header
BUSINESS_DATE	CHAR (10)	File creation date, Format MM/DD/YYYY
DETAIL_COUNT	CHAR (8)	Total count of all detail records
DETAIL_TRANS_AMOUNT	CHAR (10)	Total Amount of the Amount Due field for all the transactions in the file
LINEFEED	CHAR (1)	LF
Trailer Total	**43**	

14.5 Processing requirements

1. The VECTOR CSC shall receive and process ETC Transaction Files from the GGB Host multiple times a day at predetermined intervals (viz. every 0.5hrs, 1hr etc to be determined later).
2. Please refer to Appendix D for all transaction-processing rules.
3. ETC transactions in this file will have a unique transaction number for each record in the file.
4. All transactions coming in this interface will be processed and the resolve code values will be ignored.
5. Vector CSC can process multiple tol_trx_type in a single file. For TOL_TRX_TYPE = 3, ACS will return exactly the same response information as was returned to the GGB Host when this transaction was originally processed. The TOL_TRX_TYPE = 3 transactions can be requested up to 6 months after the original transaction was processed. ACSs' understanding of TOL_TRX_TYPE = 3 is that this type of request will come to CSC in the event the Reconciliation file is missed or failed to be applied at the Host.
6. The VECTOR CSC shall ensure upon processing that the ETC Transaction File does not contain two (or more) transactions for the same TOL_TAG_ID/TOL_TAG_AGENCY_ID combination in the same TOL_PLAZA_ID/TOL_LANE_ID within a one (1) minute period. However, this parameter shall be configurable at the VECTOR CSC based on business rule decisions between the VECTOR CSC and GGB Host.
7. The VECTOR CSC shall perform sanity checks on the ETC Transaction File to look for formatting errors, record count mismatch between header and detail records etc. In the event the file fails on these sanity checks, the VECTOR CSC shall notify the GGB Host of the anomaly by means of the acknowledgment file.
8. If the VECTOR CSC determines an error in a detail record, the VECTOR CSC shall reject the transaction record with the error and process the remainder of the transaction file and notify the GGB Host of the error via the acknowledgment file. The ACK file shall have a corresponding error code indicative of the error.

9. The VECTOR CSC shall not compute toll amounts for normal ETC transactions received from the GGB Host. The toll amount calculated at the GGB Host as supplied in the TOL_FARE_ETC_AMT field of the transaction file shall be used to debit the BATA Regional CSC accounts. This shall include transactions due to non-revenue customers also (since GGB Host would send 00000 in the TOL_FARE_ETC_AMT field).
10. VECTOR has the capability of rejecting transaction based on the age of the transaction. VECTOR will set 180 days for all incoming transactions from Away Agency (TCA, SR91 or SNDG) and 365 days for all incoming transactions from Home Agencies (CALTRANS and GGBD). This value can be changed on BATA direction.
11. The VECTOR CSC shall first check its own customer base to see if the transaction can be applied to one of its own accounts before including the transaction in a Transaction File destined for another CTOC agency.
12. TOLL_DST_FLAG is not part of the unique key for toll transactions and there shall not be any duplicate values as a result of asterisks (*). Added to ICD 1.4.1
13. ACS will calculate the Business Date based on 10:00 pm to 10:00 pm time range as follows.

    Case 1: Tx Date - 4/5, Tx Time - 13:00 hrs => Revenue Date = 4/5

    Case 2: Tx Date - 4/5, Tx Time - 23:00 hrs => Revenue Date = 4/6

    Case 3: Tx Date - 4/5, Tx Time - 22:00 hrs => Revenue Date = 4/6

14.6 Sample file

20040202222030.req

#HEADER,REQ ,000001,02/02/2004,GG,AT,02/02/2004,22:20:30
0000001234,1,1022,133015,GGB ,01,02/02/2004,19:20:30,00350,00000,01,02,00001234,1,*,005,0000000000,00
0000001234,1,0002,133015,GGB ,02,02/02/2004,19:21:10,00450,00000,01,02,00012340,1,*,015,0000000000,00
0000001234,1,0099,133015,GGB ,03,02/02/2004,19:22:20,00350,00000,01,02,00011264,1,*,018,0000000000,00
0000001234,1,1000,133015,GGB ,04,02/02/2004,19:23:30,00300,00000,01,02,00011434,1,*,020,0000000000,00
0000001234,1,0012,133015,GGB ,05,02/02/2004,19:23:30,00550,00000,01,02,00041434,1,*,005,0000000000,00
#TRAILER,000001,02/02/2004,00000005,0000002000

15. ETC Response File – GGBD

15.1 File type

Variable length, LF delimited

15.2 File name

YYYYMMDDHHMMSS.RES

Example: 20020928044100.res Created at 04:41:00 on 09/28/02
Transaction Reconciliation file from VECTOR CSC to GGBD Host

15.3 File use

The VECTOR CSC shall create an ETC Response File back to the GGBD Host, for each transaction (.req) files received.

15.4 File layout

Each field in the header, detail and trailer structure will be separated with delimiter “,” comma.

Figure 15-1 ETC Response File – Header Structure

Field Name	Type/Size	Description/Valid Values
RECORD_TYPE	CHAR (7)	“#HEADER”
FILE_TYPE	CHAR (4)	“RES ”
SEQUENCE #	CHAR (6)	Sequence # of the original Transaction File. Values 000000 – 999999
BUSINESS_DATE	CHAR (10)	The date send in the .req header record, in the BUINESS_DATE column, will be sent back in this field.
SOURCE	CHAR (2)	Indicates the destination entity. “AT” for BATA
DESTINATION	CHAR (2)	Indicates the file-creating agency. “GG” for Golden Gate
CREATE_DATE	CHAR (10)	Indicates the file creation date. Format MM/DD/YYYY
CREATE_TIME	CHAR (8)	Indicates the file creation time. Format HH:MM:SS
LINEFEED	CHAR (1)	LF
Header Total	**50**	

Figure 15-2 ETC Response File – Detail Structure

Field Name	Type/Size	Description/Valid Values
TRANSACTION_NUMBER	CHAR (10)	Unique transaction number for which this record is response. Values 0000000000 to 9999999999
TOL_TRX_TYPE	CHAR (1)	Response for the type of transaction received by CSC. 1 – ETC 3 – Request
TOL_TAG_ID	CHAR (4)	This field consists of the ETC Internal Tag ID, in accordance with Title-21 specs. Values: 0000-1023
TOL_TAG_FACILITY_ID	CHAR (6)	This field comprises of the Facility code of the Issuing agency. Values: 000000-262143
TOL_POSTED_DATE	CHAR (10)	This is the Date the transaction was processed (Posted or Rejected) on the CSC / Away Agency. Format: MM/DD/YYYY
TOL_PLAZA_ID	CHAR (3)	The plaza code of the agency at which the transaction occurred. This information shall be shown on customer statements to indicate the place of occurrence of the transaction. Value = "GGB"
TOL_LANE_ID	CHAR (2)	The lane ID at the plaza where the transaction occurred. The information from this field shall be used on customer statements to indicate the point of occurrence of the transaction. Values = 00 – 99.
TOL_FARE_POSTED_AMT	CHAR (5,2)	This is the amount posted to the ETC home or away account, posting by Tag or Plate. Values: 00000 ($000.00) – 99999 ($999.99)
NON_REVENUE_FLAG	CHAR (2)	This field indicates if the transaction was posted against Non Revenue account. Values: 00 – Default Value 01 – Non Revenue Account
PAYMENT_TYPE	CHAR (1)	A – Toll posted successfully to ETC account. V – Toll marked by the lane as a Violation and did not post to a CSC account E – An Exception occurred while trying to post this toll.
CSC_REASON_CODE	CHAR (3)	Reason toll was not posted. CSC generates this code from its own internal processing and it is sent to the GGBD Plaza Host for reference. Values 000 – 999. A detailed listing of the various reason codes is provided in Appendix B.
BUSINESS_DATE	CHAR (10)	The actual business date of the transaction. This field would identify the revenue date of the transaction. Format: MM/DD/YYYY
CSC_BATCH	CHAR (10)	This will be used to reconcile CSC and GGBD Plaza Host revenue numbers. This field will contain the original file id (extern_file_id), to map the file in which this transaction was received at the CSC. The contents of this field shall be left padded with zeros. Values: 0000000000 – 9999999999

Field Name	Type/Size	Description/Valid Values
CSC_ACCT_NO	CHAR (16)	VECTOR CSC account number assigned to BATA customers. For CTOC customers, the following is a static value for each agency 0000000000000098 - SR 91 0000000000000097 - SANDAG 0000000000000096 - TCA 0000000000000095 - CTV 0000000000000094 - SENTRY
LINEFEED	CHAR (1)	LF
Detail Record Total	**84**	

Figure 15-3 ETC Response File – Trailer Structure

Field Name	Type/Size	Description/Valid Values
RECORD_TYPE	CHAR (8)	"#TRAILER"
SEQUENCE #	CHAR (6)	Same as Header
FILE_DATE	CHAR (10)	File creation date, Format MM/DD/YYYY
DETAIL_COUNT	CHAR (8)	Total count of all detail records
LINEFEED	CHAR (1)	LF
Trailer Total	**33**	

15.5 Processing requirements

1. All transactions received at the VECTOR CSC, via the ETC Transaction File, shall be sent back to the GGB Host in the reconciliation file.

2. All regular transactions TOL_TRX_TYPE = 1 (ETC) received by the CSC, will be reconciled back with final status code. The reconciliation will be at file level. Example CSC receives 100 transactions in file 123, same 100 transactions will be reconciled back to GGBD in one file, no less than once a day.

3. The CSC will produce reconciliation within 9 hours of receipt of transaction file and will produce reconciliation files by 10am each day for the previous day's files.

4. CSC will always look for unique TRANSACTION_NUMBER and cannot maintain relationship between Violation Number and Original Transaction Number.

5. The VECTOR CSC shall perform transaction reconciliation at a detail level. i.e. the reconciliation file shall contain details at the transaction level instead of a reconciliation summary.

6. The VECTOR CSC will reconcile all Away Transactions with Expected Revenue and not wait for reconciliation file from Away Agency. However in the event the transactions are rejected by the Away agency due to any reasons, the revenue delta will be reflected through Reports.

7. In cases when a transaction cannot be posted at the VECTOR CSC, the VECTOR CSC shall indicate the reason, the transaction was not posted in the CSC_REASON_CODE field. The possible reason codes and the description are provided in Appendix B.

8. The VECTOR CSC shall assign a unique integer value to all incoming transaction files from the GGB Host. This unique identifier shall be sent as part of the reconciliation file to the GGB Host for all transactions posted and reconciled against a particular agency. The unique identifier shall be specified in the CSC_BATCH field of the reconciliation file.

9. Vector CSC can process multiple tol_trx_type in a single file. For TOL_TRX_TYPE = 3, ACS will return exactly the same response information as was returned to the GGB Host when this transaction was originally processed. The TOL_TRX_TYPE = 3 transactions can be requested up to 6 months after the original transaction was processed. ACS understanding of TOL_TRX_TYPE = 3 is that this type of request will come to CSC in the event the Reconciliation file is missed or failed to be applied at the Host.

10. The time frame for the GGBD host, in order to initiate such a request (tol_trx_type = 3) will be 6 months.

11. The Response file will contain the initial reconciliation code (for Home agencies) and the 'posted' reconciliation code for CTOC agencies. In case there is no data available for the requested transaction, a code of 'Not Found' will be sent back to the GGB host.

12. The field called CSC_ACCT_NO was added to the interface, solely for the convenience of GGBD. However, any analysis or research needs involving account numbers shall only be obtained through the CSC Host.

13. The VECTOR CSC shall use the toll amount as supplied in the TOL_FARE_CASH_AMT field to process violations. All postable transactions shall use the amount in the TOL_FARE_ETC_AMT field, while transactions that are eligible for notice escalation shall use the amount in the TOL_FARE_CASH_AMT field.

14. The GGB Host will periodically generate and transmit ETC and VIO files to the CSC. GGB will periodically poll the area ACK files are transferred to the Host by the CSC. When an ACK file is received the GGB database will be updated. If the ACK file shows a FAILURE code the GGB Host will regenerate and resend the original file. A failure count will be maintained and after 3 concurrent failures of a single file an email will be sent to the GGB System Operators.

15. If an ACK file is not received within 2 hours of an ETC or VIO file being transmitted to the CSC an email will be generated to the CSC and GGB System Operators. Another email will be sent every 2 hours to a designated list escalating the issue until the situation is resolved.

16. A recon file should be received within 9 hours of an ETC or VIO Transaction file being transmitted to the CSC and no later than 10 am for the previous day's files.

17. GGB will periodically poll the area recon files are transferred to the Host by the CSC. When a new file is received GGB will load the file and perform certain validations. In all cases the GGB Host will generate an ACK file and transmit this back to the CSC. The ACK file will contain a SUCCESS code (value 0) if the recon file passed validation and was sent to the lanes or a FAILURE code (value 01) if the recon file failed validation.

18. A recon file will always be ACKED with a FAILURE code if it is received before the ACK file for the corresponding ETC or Violation Transaction File. If a recon file is not received within 9 hours or by 10 am for the previous day's files, the GGB Host will automatically send an email to

the CSC and GGB Sysops stating the “recon file is late or missing”. This check will be repeated every 2 hours and an email will be sent to a designated list escalating the issue until the situation is resolved.

15.6 Sample File

20040203043030.res

#HEADER,RES ,000001,02/02/2004,AT,GG,02/03/2004,043030
0000000789,1,1022,133015,02/03/2004,GGB,01,00350,00,1,000,02/02/2004,0012300443, 0000000000115678
0000000790,1,0002,133015,02/03/2004,GGB,02,00450,00,1,000,02/02/2004,0012300443, 0000000000118907
0000000791,1,0099,133015,02/03/2004,GGB,03,00350,00,1,000,02/02/2004,0012300443, 0000000000147988
0000000792,1,1000,133015,02/03/2004,GGB,04,00300,00,1,000,02/02/2004,0012300443, 0000000000100964
0000000793,1,0012,133015,02/03/2004,GGB,05,00550,00,1,000,02/02/2004,0012300443, 0000000000135475
#TRAILER,000001,02/03/2004,00000005

16. Violations Transaction File - GGBD

16.1 File type

Variable length, LF delimited

16.2 File name

YYYYMMDDHHMMSS.VIO

Example: 20020928044100.vio
GGBD violation transactions to VECTOR CSC created at 04:41:00 on 09/28/02

16.3 File use

The violation Transaction File shall be created by the GGBD Host to inform the VECTOR CSC of all violation transactions, including all violations transactions that the CSC will not process (e.g. paid-on-import), occurring at GGBD lanes. This file will be in the same format as that of the ETC Transaction File for GGBD
All violation transactions, including, those written off by GGB (resolve_code 92) and those paid-on-import (resolve_code 98) through the ETC interface, may be received at the CSC in this interface. The CSC will ignore all transactions (which have a resolve code between 90 and 99) and return a csc_reason_code of 'Authority Reject' in the reconciliation file.

16.4 File layout

Each field in the header, detail and trailer structure will be separated with Delimiter "," comma.

Figure 16-1 Violation Transaction File – Header Structure

Field Name	Type/Size	Description/Valid Values
RECORD_TYPE	CHAR (7)	"#HEADER"
FILE_TYPE	CHAR (4)	"VIO "
SEQUENCE #	CHAR (6)	Sequence # of the violation transaction File. This unique number is incremented for every file. Values 000000 – 999999

BUSINESS_DATE	CHAR (10)	This field will be populated with the transaction date of the first transaction in the file. Format MM/DD/YYYY
SOURCE	CHAR (2)	Indicates the file-creating agency. "GG" for
DESTINATION	CHAR (2)	Indicates the destination entity. "AT" for BATA
CREATE_DATE	CHAR (10)	Indicates the file creation date. Format MM/DD/YYYY
CREATE_TIME	CHAR (8)	Indicates the file creation time. Format HH:MM:SS
LINEFEED	CHAR (1)	LF
Header Total	**50**	

Figure 16-2 Violation Transaction File – Detail Structure

Field Name	Type/Size	Description/Valid Values
TRANSACTION_NUMBER	CHAR (10)	Unique violation transaction number for each transaction. Used to identify the violation transaction in the reconciliation process. Values 0000000000 to 9999999999
TOL_TRX_TYPE	CHAR (1)	Type of transaction. 2 – Violation
TOL_TAG_ID	CHAR (4)	This field consists of the ETC Internal Tag ID, in accordance with Title-21 specs. Values: 0000-1023 Default this field to asterisks (*) for all violations with no tag reads.
TOL_TAG_FACILITY_ID	CHAR (6)	This field comprises of the Facility code of the Issuing agency. Values: 000000-262143 Default this field to asterisks (*) for all violations with no tag reads.
TOL_PLAZA_ID	CHAR (3)	The plaza code of the agency at which the transaction occurred. This information shall be shown on customer statements to indicate the place of occurrence of the transaction. Value = "GGB"
TOL_LANE_ID	CHAR (2)	The lane ID at the plaza where the transaction occurred. The information from this field shall be used on customer statements to indicate the point of occurrence of the transaction. Values = 00 – 99.
TOL_TRX_DATE	CHAR (10)	The date of the occurrence of the transaction at TOL_LANE_ID. Format: MM/DD/YYYY. This toll transaction date information shall be shown on customer statements.
TOL_TRX_TIME	CHAR (8)	The time of the occurrence of the transaction at TOL_LANE_ID. Format: HH:MM:SS. This toll transaction time information shall be shown on customer statements.
TOL_FARE_ETC_AMT	CHAR (5,2)	The toll due as calculated by the GGBD Lane / Host. This is the amount to be posted to the ETC home or away account, posting by Tag or Plate. Values: 00000 ($000.00) – 99999 ($999.99)
TOL_FARE_CASH_AMT	CHAR (5,2)	The toll due as calculated by the GGBD Lane / Host. This amount should be used for Violation Notices. This amount includes only the toll amount. The fee/penalty shall be calculated at the VECTOR CSC during processing Values: 00000 ($000.00) – 99999 ($999.99)

Field Name	Type/Size	Description/Valid Values
TOL_MSG_FLAG	CHAR (2)	The message buffer status flag. This field indicates whether or not a transaction was buffered. Values: 00-99. 1 – Toll packet transaction. 2 – Buffered tag transaction
TOL_AVC_CLASS	CHAR (2)	The class of the vehicle involved in the transaction. This field shall contain AVC class or as overridden by the collector classification.
LANE_TX_SEQUENCE_NUMBER	CHAR (8)	The unique vehicle transaction sequence number generated by lane (Lane sequence number). Values:00000000 – 99999999
TOL_TAG_STATUS	CHAR (1)	The status of the tag at the time of the transaction. Values: 0 – 9 0 - Invalid 1 – Good 2 – Lost 3 – Stolen 4 – Low Balance 8 – Non-revenue vehicle (NRV)
TOL_DST_FLAG	CHAR (1)	The daylight savings time. The contents of this field shall be used to govern certain processing rules at the VECTOR CSC
TOL_TRX_SPEED	CHAR (3)	The transaction speed as reported by the lane. Values 000 – 999
VIOL_NUMBER/ORIG_TRX_NUMBER	CHAR (10)	For a violation transaction, this will hold the original transaction number.

Field Name	Type/Size	Description/Valid Values
RESOLV_CODE	CHAR (2)	The code established for a violation transaction following ETC posting and review audit review. CSC will process only code '02' violations. The codes the CSC will receive are: 02 – violation that needs to be processed at the CSC The CSC shall respond to the GGB Host with a resolve code of 92 (as GGB's equivalent for Authority Rejects) The CSC shall respond to the GGB Host with a resolve code of 98 for all transactions posted (paid on import) All the following are write-off codes, except 98 which is an ETC violation that was paid via the ETC Interface 90 – equipment problems 91 – when light curtain breaks, and this violation is a trailer 92 – miscellaneous write-off – documented and tracked by Revenue Audit 93 – vehicle backed up 94 – non revenue violator/CHP as documented by Bridge Officer during tour 95 – late commit carpool as documented by Bridge Officer during tour 96 – late commit cash paid as documented by Bridge Officer during tour 97 – late commit handicap, or disabled card that did not read as document by Bridge Officer 98- Paid on Import (via the ETC Interface) 99 – miscellaneous write-off – reported by Bridge Officer, documented and tracked by Revenue Audit
LINEFEED	CHAR (1)	LF
Detail Record Total	**84**	

Figure 16-3 Violation Transaction File – Trailer Structure

Field Name	Type/Size	Description/Valid Values
RECORD_TYPE	CHAR (8)	"#TRAILER"
SEQUENCE #	CHAR (6)	Same as Header
BUSINESS_DATE	CHAR (10)	File creation date, Format MM/DD/YYYY
DETAIL_COUNT	CHAR (8)	Total count of all detail records
DETAIL_TRANS_AMOUNT	CHAR (10)	Total Amount of the Amount Due field for all the transactions in the file
LINEFEED	CHAR (1)	LF
Trailer Total	**43**	

16.5 Processing requirements

1. The VECTOR CSC is capable of receiving and processing Violation Transaction Files from the GGB Host multiple times a day.
2. Violation transactions in this file will have a unique transaction number for each record in the file. GGBD Host would replace the transaction_number with the violation_number, prior to sending the transaction to the CSC.
3. CSC will always look for unique TRANSACTION_NUMBER and will not maintain relationship between Violation Number and Original Transaction Number.
4. The VECTOR CSC shall perform sanity checks on the Violation Transaction File to look for formatting errors, record count mismatch between header and detail records etc. In the event the file fails on these sanity checks, the VECTOR CSC shall notify the GGB Host of the anomaly by means of the acknowledgment file.
5. If the VECTOR CSC determines an error in a detail record, the VECTOR CSC shall reject the transaction record with the error and process the remainder of the transaction file and notify the GGB Host of the error via the acknowledgment file. The ACK file shall have a corresponding error code indicative of the error.
6. The VECTOR CSC shall use the toll amount as supplied in the TOL_FARE_CASH_AMT field to process violations. All postable transactions shall use the amount in the TOL_FARE_ETC_AMT field, while transactions that are eligible for notice escalation shall use the amount in the TOL_FARE_CASH_AMT field.
7. VECTOR has the capability of rejecting transaction based on the age of the transaction. VECTOR will set 180 days for all incoming transactions from Away Agency (TCA, SR91 or SNDG) and 365 days for all incoming transactions from Home Agencies (CALTRANS and GGBD). This value can be changed on BATA direction.
8. ACS will calculate the Business Date based on 10:00 pm to 10:00 pm time range as follows.

   Case 1: Tx Date - 4/5, Tx Time - 13:00 hrs => Revenue Date = 4/5

   Case 2: Tx Date - 4/5, Tx Time - 23:00 hrs => Revenue Date = 4/6

   Case 3: Tx Date - 4/5, Tx Time - 22:00 hrs => Revenue Date = 4/6

16.6 Sample File

20040202224030.vio

```
#HEADER,VIO ,000001,02/02/2004,GG,AT,02/02/2004,22:40:30
0000002556,2,*   ,*     ,GGB,01,02/02/2004,10:13:30,00350,00350,01,02,00005697,0,*,015,0074568464,02
0000002557,2,*   ,*     ,GGB,02,02/02/2004,12:56:10,00450,00450,01,02,00059624,0,*,005,0098573645,02
0000002558,2,*   ,*     ,GGB,03,02/02/2004,13:46:20,00350,00350,01,02,00012856,0,*,020,0009586867,02
0000002559,2,*   ,*     ,GGB,04,02/02/2004,15:23:30,00300,00300,01,02,00097843,0,*,014,0000036455,02
0000002560,2,*   ,*     ,GGB,05,02/02/2004,19:19:19,00550,00550,01,02,00069568,0,*,012,0000045756,02
#TRAILER,000001,02/02/2004,00000005,0000002000
```

17. Violation Reconciliation File – GGBD

17.1 File type

Variable length, LF delimited

17.2 File name

YYYYMMDDHHMMSS.VRES

Example: 20020928044100.vres Created at 04:41:00 on 09/28/02
Violation Reconciliation file from VECTOR CSC to GGBD Host

17.3 File use

The VECTOR CSC shall create a Violation Response File back to the GGBD Host, by business day indicating the transactions within different hours. This file shall be used to send final and interim status on violation transactions.

17.4 File layout

Each field in the header, detail and trailer structure will be separated with delimiter "," comma.

Figure 17-1 Violation Response File – Header Structure

Field Name	Type/Size	Description/Valid Values
RECORD_TYPE	CHAR (7)	"#HEADER"
FILE_TYPE	CHAR (4)	"VRES "
SEQUENCE #	CHAR (6)	Sequence # of the original violation transaction File. Values 000000 – 999999
BUSINESS_DATE	CHAR (10)	The date send in the .vio header record, in the BUINESS_DATE column, will be sent back in this field.
SOURCE	CHAR (2)	Indicates the file-creating agency. "AT" for BATA
DESTINATION	CHAR (2)	Indicates the destination entity. "GG" for Golden Gate
CREATE_DATE	CHAR (10)	Indicates the file creation date. Format MM/DD/YYYY
CREATE_TIME	CHAR (8)	Indicates the file creation time. Format HH:MM:SS
LINEFEED	CHAR (1)	LF
Header Total	**50**	

Figure 17-2 Violation Response File – Detail Structure

Field Name	Type/Size	Description/Valid Values
TRANSACTION_NUMBER	CHAR (10)	Unique transaction number for which this record is response. Values 0000000000 to 9999999999
TOL_TRX_TYPE	CHAR (1)	Response for the type of transaction received by CSC. 2 – Violation
TOL_TAG_ID	CHAR (4)	This field consists of the ETC Internal Tag ID, in accordance with Title-21 specs. Values: 0000-1023
TOL_TAG_FACILITY_ID	CHAR (6)	This field comprises of the Facility code of the Issuing agency. Values: 000000-262143
TOL_POSTED_DATE	CHAR (10)	This is the Date the transaction was processed (Posted or Rejected) on the CSC / Away Agency. Format: MM/DD/YYYY
TOL_PLAZA_ID	CHAR (3)	The plaza code of the agency at which the transaction occurred. This information shall be shown on customer statements/notices to indicate the place of occurrence of the transaction. Value = "GGB"
TOL_LANE_ID	CHAR (2)	The lane ID at the plaza where the transaction occurred. The information from this field shall be used on customer statements/notices to indicate the point of occurrence of the transaction. Values = 00 – 99.
TOL_FARE_POSTED_AMT	CHAR (5,2)	This is the amount posted to the ETC home or away account, posting by Tag or Plate. Values: 00000 ($000.00) – 99999 ($999.99)
VIOL_PAYMENT_FEE	CHAR (5)	This is the amount received at the CSC for violations that were escalated to noticing.
NON_REVENUE_FLAG	CHAR (2)	This field indicates if the transaction was posted against Non Revenue account. Values: 00 – Default Value 01 – Non Revenue Account
PAYMENT_TYPE	CHAR (1)	A – Toll posted successfully to ETC account. V – Toll marked by the lane as a Violation and did not post to a CSC account E – An Exception occurred while trying to post this toll.
CSC_REASON_CODE	CHAR (3)	Reason violation transactions were not posted. CSC generates this code from its own internal processing and it is sent to the GGBD Plaza Host for reference. Values 000 – 999. A detailed listing of the various reason codes is provided in Appendix B.
BUSINESS_DATE	CHAR (10)	The actual business date of the transaction. This field would identify the revenue date of the transaction. Format: MM/DD/YYYY

Field Name	Type/Size	Description/Valid Values
CSC_BATCH	CHAR (10)	This will be used to reconcile CSC and GGBD Plaza Host revenue numbers. This field will contain the original file id (extern_file_id), to map the file in which this transaction was received at the CSC. The contents of this field shall be left padded with zeros. Values: 0000000000 – 9999999999
LINEFEED	CHAR (1)	LF
Detail Record Total	**73**	

Figure 17-3 Violation Response File – Trailer Structure

Field Name	Type/Size	Description/Valid Values
RECORD_TYPE	CHAR (8)	"#TRAILER"
SEQUENCE #	CHAR (6)	Same as Header
FILE_DATE	CHAR (10)	File creation date, Format MM/DD/YYYY
DETAIL_COUNT	CHAR (8)	Total count of all detail records
LINEFEED	CHAR (1)	LF
Trailer Total	**33**	

17.5 Processing requirements

1. All transactions received at the VECTOR CSC, via the Violation Transaction File, shall be sent back to the GGB Host in the reconciliation file.

2. All violation transactions TOL_TRX_TYPE = 2 received by the CSC, will be reconciled back with an interim code for all Home and CTOC transactions. The reconciliation will be at file level. Example CSC receives 100 transactions in file 123, same 100 transactions will be reconciled back to GGBD in one file, no less than once a day. In order to accommodate GGB Host operational requirements, VECTOR CSC will reconcile all GGB transaction files by 10 am the following day.

3. The CSC will produce reconciliation within 9 hours of receipt of transaction file and will produce reconciliation files by 10am each day for the previous day's files. The check for receipt of reconciliation files, by GGB, should be performed no earlier than 10:30am for the previous day's transaction files. This check will be repeated every 4 hours.

4. The VECTOR CSC shall perform transaction reconciliation at a detail level. i.e. the reconciliation file shall contain details at the transaction level instead of a reconciliation summary.

5. The VECTOR CSC shall assign a unique value to all incoming transaction files from the GGB Host. This unique identifier shall be sent as part of the reconciliation file to the GGB Host for all transactions posted and reconciled against a particular agency. The unique identifier shall be specified in the CSC_BATCH field of the reconciliation file.

6. All violation transactions, including, those written off by GGB (resolve_code 92) and those paid-on-import (resolve_code 98) through the ETC interface, may be received at the CSC in this

interface. The CSC will ignore all transactions (which have a resolve code between 90 and 99) and return a csc_reason_code of 'Authority Reject' in the reconciliation file.

7. The CSC will try to match all violation transaction to their corresponding image file and will return a status of 'transaction matched-send to image review' for those transactions. For all transactions, which are pending image review and are in a 'waiting for image' status, for more than 5 days will have to be researched by the GGB host.

17.6 Sample File

```
20040203044030.vres
#HEADER,VRES ,000001,02/02/2004,AT,GG,02/03/2004,04:40:30
0000003484,2,0895,133015,02/02/2004,GGB,01,00350,00000,00,A,103,02/02/2004,0003484564
0000003485,2,0956,133015,02/02/2004,GGB,02,00450,00000,00,A,103,02/02/2004,0003484564
0000003486,2,*   ,*     ,02/02/2004,GGB,03,00350,00000,00,V,102,02/02/2004,0003484564
0000003487,2,0345,133015,02/02/2004,GGB,04,00300,00000,00,A,103,02/02/2004,0003484564
0000003488,2,0243,133015,02/02/2004,GGB,05,00550,00000,00,A,103,02/02/2004,0003484564
#TRAILER,000001,02/03/2004,00000005
```

18. DMV Request File

18.1 File type

Variable length, LF delimited

18.2 File name

FILENAME.EXT

18.3 File use

This file contains license plate numbers that are to be sent to the DMV. This interface will be used for all the transactions on BATA REGIONAL CSC requiring License plate lookup for California License Plates only.

18.4 File layout

This file does not have any header or trailer record.

Figure 18-1 DMV Request File – Detail Structure

Field Name	Type/Size	Description/Valid Values
TRANSACTION_NUMBER	CHAR (11)	Unique violation transaction identifier. Values 00000000000 to 99999999999
TRANSACTION_DATE	CHAR (8)	Date when transaction occurred. Format: YYYYMMDD
CARDINALITY	CHAR (1)	Gives the number of file codes for this plate. The possible files types in the DMV database should be looked up to find the plate. So, if the cardinality is one, the plate number is listed as it exists in the Cosmic database, because only one file type has to be looked up. If the cardinality is 2, the plate number is listed twice with file type appended to the end of the plate number. If the cardinality is 3, the plate number is listed three times with the file type appended to the end of the plate number. The plate numbers are separated by a space and one of the listed numbers wouldn't have a file type appended to it because it is used to look up in the default file type. Values: 1- 5

Field Name	Type/Size	Description/Valid Values
PLATE_TYPE	CHAR (1)	Type of plate (Environment/government etc) A - Auto, Historical Vehicle B - Vessels (provided on tape image inquiries only) C - Commercial E - Exempt F - OHV H - Ham Operator I - Apportioned (Pro-Rate Base) L - Environmental License Plate M - Motorcycle P - Prorate ID Commercial and Trailer S - Special Vehicles T - Trailer, Horseless
PLATE_NO	CHAR (7)	License Plate Number
FILLER	CHAR (31)	Spaces
LINEFEED	CHAR (1)	CR/LF
Detail Record Total	**60**	

18.5 Processing requirements

1. All requests for demographic information from the VECTOR CSC to the CADMV shall be routed through the BATA Host. All requests from the VECTOR CSC to the BATA Host shall conform to the specification as laid out in Section 18.4 of this document.

2. The VECTOR CSC shall create one file per day per BATA constituent agency (one file containing all DMV requests for toll evasions on CALTRANS and one file for all DMV requests for toll evasions on GGB).

3. The VECTOR CSC shall transmit the request file to the Interface Server, which in turn will send the file to the CALTRANS host (a shared directory or a NFS mount with in the CALTRANS firewall) using the authentication information (user name and password) to be provided by the BATA Host. The BATA Host shall also provide any subsequent change in the authentication information if any.

19. DMV Response File

19.1 File type

Variable length, LF delimited

19.2 File name

FILENAME.EXT

19.3 File use

This file contains demographic information of the license plate number owner and the make of the model. This file contains data in response to the DMV Request file.

19.4 File layout

This file does not have any header or trailer record.

Figure 19-1 DMV Response File – Detail Structure

Field Name	Type/Size	Description/Valid Values
TRANSACTION_NUMBER	CHAR (11)	This field is a duplicate of the transaction number in the request file, which contains all 11 digits, right justified, left padded with zeros. Values 00000000000 to 99999999999
TRANSACTION_DATE	CHAR (8)	Date when transaction occurred. Format: YYYYMMDD
PLATE_NO	CHAR (7)	License Plate Number
REQUEST_DATE	CHAR (8)	DMV Server Request Date. Format: YYYYMMDD
REQUEST_TIME	CHAR (6)	DMV Server Request Time. Format: HHMMSS
RETURN_CODE	CHAR (1)	Match found in the DMV database – 1 Plate not present in the DMV database – 0
PLATE_NO_MODEL_YEAR	CHAR (8)	Either the plate# or the year and make of the vehicle depending on the return code. If the return code is 0 then the former is the value and if 1 the latter is. Because, this is an eight-character field, only the first 4 characters of the vehicle make or model is included.

Field Name	Type/Size	Description/Valid Values
TEXT_1	CHAR (136)	Free form text field. It is somewhat structured, especially for a return code of 1, but pretty much anything can be expected especially if the return code is 0. If the return code is 0, the text may contain non-alphanumeric characters and it's right justified, so this field's text follows the end of the previous field. If the return code is 1, the text is structured as: 10 spaces followed by Name followed by some space followed by address followed by zip. Some things to note about this field again are: 1. It is a free form text field. 2. For a return code of 1 the text is always padded with leading spaces of 10 char length. 4. The name might be one word or more. If it is more than one word, it can be first and last name, or first last and middle initial, or first, middle initial and last name, it could also be the names of two people with an and or an or between them. 5. The address follows the usual structure of an address, mainly: street, city, zip, but it may not be a complete address or correct zip code. The zip code may contain Alpha character/s, especially at the end. 6. Following the zip code is the end of line character. End of line character is CR/LF as in windows or DOS.
Linefeed	CHAR (1)	End of line character. End of line character is CR/LF as in windows or DOS.
Detail Record Total	**186**	

19.5 Processing requirements

1. All requests for demographic information from the CADMV to the VECTOR CSC shall be routed through the BATA Host. All responses from the BATA Host to the VECTOR CSC shall conform to the specification as laid out in Section 19.4 of this document.

2. The VECTOR CSC shall receive one file per day per BATA constituent agency (one file containing all responses from the CADMV for toll evasions on CALTRANS and one file for all DMV requests for toll evasions on GGB).

3. The VECTOR CSC shall pick up the file from the CALTRANS host (a shared directory or a NFS mount with in the CALTRANS firewall) using the authentication information (user name and password) to be provided by the BATA Host. The BATA Host shall also provide any subsequent change in the authentication information if any.

20. Violation Image Data File

20.1 File type

Fixed length, LF delimited

20.2 File name

Example: Image received from CALTRANS

<AGENCY_ID><PLAZA_ID><LANE_ID><TRX_DATE><TRX_TIME><VEHICLE_SEQUENCE_NUMBER(LANE_TX_SEQUENCE_NUMBER for GGBD)>.VDF

Example: Image received from GGBD

<AGENCY_ID><LANE_ID><TRX_DATE><TRX_TIME><VEHICLE_SEQUENCE_NUMBER(LANE_TX_SEQUENCE_NUMBER for GGBD)>.VDF

20.3 File use

This file is created for each Violation transaction for which the Image is matched. The violation image data file should exactly match the filename of the image. The images should have a file type indicating the image number.

All images and Image Data file will be zipped and sent as one zipped file.

20.4 File layout

This file does not have any header or trailer record.

Figure 20-1 Violation Image Data File – Detail Structure

Field Name	Type/Size	Description/Valid Values
AGENCY_ID	CHAR (3)	Agency the violation transaction occurred. (CALTRANS – "CAL" and Golden Gate – "GGB")
PLAZA_ID	CHAR (4)	Plaza where the violation transaction occurred.
LANE_ID	CHAR (3)	Lane where the violation transaction occurred.
TRX_DATE	CHAR (8)	Violation transaction occurrence date. Format: YYYYMMDD
TRX_TIME	CHAR (8)	Violation transaction occurrence time. Format: HHMMSSTT (in milliseconds)

Field Name	Type/Size	Description/Valid Values
VEHICLE_SEQUENCE_NUM	CHAR (8)	The unique vehicle transaction sequence number generated by lane. Values:00000000 – 99999999
OCR_READ_CONFIDENCE	CHAR (3)	Over all Read confidence from the VIP (OCR Reader) Default to spaces
PLATE_NUMBER	CHAR (10)	Plate Number of the vehicle Default to spaces
PLATE_STATE	CHAR (4)	Plate State of the vehicle Default to spaces
NUMBER_OF_IMAGES_TRX	CHAR (1)	Number of Images for this transaction
IMAGE_INDEX_NUMBER	CHAR (1)	Image Index number used by OCR to read plate number and plate state. Default to spaces
FILLER	CHAR (10)	Reserved for Future
LINEFEED	CHAR (1)	LF
Detail Record Total	**64**	

20.5 Processing requirements

9. All the images (four color images in JPEG format and one black and white image in BMP format for CALTRANS and four jpeg black and white for GGB shall be zipped as specified in Section 20.3 of this document.
10. The BATA Host shall create this file to indicate the image information that is linked to the transaction on the CALTRANS and GGB lanes.
11. All images from the file shall be processed based on the overall confidence level of the associated image.
12. An overall confidence level of 85% shall be required at the VECTOR CSC for an image to be processed without image review. i.e., any image with an overall confidence level of 85% or higher shall not be subject to “manual” image review.
13. In cases where the detail record indicates an overall confidence level of 85% or more but a zipped image file is not found, the transaction will be stored in the system. As No Image is found, the transaction will not go through further processing. The transactions will be rejected and final reconciliation status will be sent back. The transaction will stay as “waiting for image” for 30 days, after which, it will be set to “no_image” status (i.e. end of violation processing). This is also applicable for all transaction files with no images.
14. If the overall confidence level of an image in the file is indicated as 85% or below, the VECTOR CSC shall process the transaction after “manual” image review.
15. The CALTRANS host sends color and black/white images to the VECTOR CSC. The VECTOR CSC shall select from all images received (b/w or color), however the violation notice will contain a printed image in black and white.
16. VECTOR System tries to match the transactions to the images for one month (30 days from transaction date). After a month the transactions are reconciled back as Violation With No Image.
17. Violation Reports like V1NP shall be used to Identify number of transactions waiting for Images. The CSC uses this report.
18. CSC timing considerations, for the receipt of this file, are based on the GGB standards of 5-day reconciliation back to the host. Hence the CSC expects a maximum delay of 5 days. However transactions not matched with images will appear as such on the transaction reports.

19. The VDF files shall be placed on a Unix machine, and any duplicate filenames shall be overwritten at the time of the drop.
20. Image files are sent by GGB no later than 6 days from image capture. 98% of images are reviewed at the RCSC by 11th day from image capture at the lane. Violation notices shall be sent by the 18th day from image capture in the lane.

21. DMV Holds/Clear Request File

21.1 File type

Variable length, LF delimited

21.2 File name

<CA><hldrel><mmddyy><hhmmss>.dat

e.g. Cahldrel050205122020.dat

CAhldrel – requesting hold/clears
050205 – Transaction Date
122020 – Transaction Time (in seconds)

21.3 File use

This file is created, by the VECTOR CSC, for each DMV hold/clear request to be sent to the DMV.

21.4 File layout

This file does not have any header or trailer record.

Figure 21-1 DMV Hold/Clear Request File – Detail Structure

Field Name	Type/Size	Description/Valid Values
DMV_CLIENT_CODE	CHAR (2)	DMV code for the agency requesting the hold/clear Values: 'AT'
REC_TYPE	CHAR (1)	Type of request – H – Hold R – Release
CSC_PLATE_NO	CHAR (7)	Plate number identified by the CSC to be put on hold/clear by the DMV.
FILLER_1	CHAR (1)	Filler data Value: Space
LAST_NAME	CHAR (5)	The last name, as recorded in the CSC system. (First 5 chars only) Left justified, space filled.

Field Name	Type/Size	Description/Valid Values
DMV_TICKET_NUM	CHAR (11)	The unique citation number for the record going to the DMV. Left justified, space filled.
DMV_STATUS_CODE	CHAR (1)	For a plate related hold request, if the current plate was already put on hold by the DMV, through an earlier request by the CSC. For clear request, this field will be null. For a list of all status codes, please refer to the table below.
VIOL_DATE	CHAR (6)	Date of violation. Format: MMDDYY
VEHICLE_MAKE	CHAR (3)	Make of the vehicle, as recorded in the CSC system e.g. (BMW/HON/FOR/MER)
TRX_AMT_DUE	CHAR (3)	Amount due to the CSC for the violation (Violation amount + Fee.) Values: 000 – 999 ($ only, no cents)
VIOL_NOTICE_DATE	CHAR (6)	Date the final notice (DMV Hold warning) was issued to the violator. Format: MMDDYY
DMV_COURT_CODE	CHAR (5)	DMV requestor code. Unique for each agency. Values: 01010 – CALTRANS 38006 - GGB
FILLER_2	CHAR (82)	Filler data Value: Space
Detail Record Total	**133**	

21.5 Processing requirements

- All violation transactions, which are fully unpaid, will be in this file.
- Holds requests will not be created in the following scenarios –
    1. A notice of Violation or Notice of Delinquent Violation is contested.
    2. A Notice of Release of Liability form (REG. 138) is returned with evidence that the registered owner has sold the vehicle and the processing agency ahs verified with DMV that the registered owner complied with VC Section 5602.
    3. An affidavit of non-liability with proof of a written lease or rental agreement including the name, address and driver license number of the lessee or rentee is submitted within 30 days of the mailing of the delinquent notice (VC 40409 and 40264)
    4. Failure to provide a copy (may be a photo static copy) of the original Notice of Violation to the person receiving the delinquent notice within 15 days of the request (VC 40206.5 and 40261).
    5. A hold will not be placed if the citation is over 36 months old from the violation date.
    6. Dealer License Plates
    7. Farm equipment
    8. Mopeds
    9. Exempt licensees
    10. Disabled persons placards
    11. Vessels

- DMV Holds will be recalled, via a clear request by the CSC, in the following scenarios –
    1. When a court awards a civil judgment or the agency grants a review of the issuance of a citation, after a Notice of Delinquent violation hold has been placed on the vehicle registration record, the notice MUST be recalled from DMV.
- Amount sent to DMV will be $$$ values only and no cents will be sent. (e.g. 2.75 (toll) + 25 (fee) = 27.25 Total. Record sent to DMV will be 027)

Figure 21-2 DMV Status Codes

CODE	DESCRIPTION
0	MARK ELIGIBLE
1	MARK REQUEST
2	MARK CONFIRMED
3	CLEAR (CHARGABLE) REQUEST
4	CLEAR (CHARGABLE) CONFIRMED
5	CLEAR (FREE) REQUEST
6	CLEAR (FREE) CONFIRMED
7	CLEAR (FREE) REJECTED
8	MARK REQUEST REJECTED
9	CLEAR (CHARGABLE) REJECTED
A	MARK RE-REQUEST
B	MARK REJECTED RE-REQUEST
D	RMV CLEAR CONFIRMED (BOST)
F	RMV FREE CLEAR CONFIRMED (BOST)
U	UNRECONCILED (BOSTON ONLY)
R	NON-RENEW REG (LA)
C	PROOF OF PAYMENT (LA)
T	TRANSFER OF OWNERSHIP (LA)

22. DMV Holds/Clear Response File

22.1 File type

Variable length, LF delimited

22.2 File name

<CA><mcl><mmddyy><hhmmss><03>).don

e.g. Camcl05020512202003.don

CA – Static value
mcl – Static value (marks and clears)
050205 – Transaction Date
122020 – Transaction Time
0000000001 – File Sequence Number

22.3 File use

This file is created, by the DMV, for each DMV hold/clear request file received from the VECTOR.

22.4 File layout

This file does not have any header or trailer record.

Figure 22-3 DMV Response File RAW DATA – Detail Structure

Field Name	Type/Size	Description/Valid Values
DMV_RESP_CODE	CHAR (80)	DMV RESPONSE containing success and reject information.

Field Name	Type/Size	Description/Valid Values
DMV_CLIENT_CODE	CHAR (2)	DMV code for the agency receiving the hold/clear response from the DMV Values: AT
REC_TYPE	CHAR (1)	Type of request – H – Hold R – Release
DMV_PLATE_NO	CHAR (7)	Plate number, sent by the DMV, on which the hold/clear was applied.
FILLER_1	CHAR (1)	Filler data Value: Space
LAST_NAME	CHAR (5)	The last name, of the violator, as recorded with the DMV. (First 5 chars only) Left justified, space filled.
DMV_TICKET_NUM	CHAR (11)	The unique citation number for the record, as sent by the requesting agency. Left justified, space filled.
FILLER_2	CHAR (2)	Filler data Value: Space
DMV_STATUS_CODE	CHAR (1)	The status of the request of hold/clear, as sent by the DMV. Value: 0
VIOL_DATE	CHAR (6)	Date of violation. Format: MMDDYY
VEHICLE_MAKE	CHAR (3)	Make of the vehicle, as recorded in the CSC system e.g. (BMW/HON/FOR/MER)
TRX_AMT_DUE	CHAR (3)	Amount due to the CSC for the violation (Violation amount + Fee.) Values: 000 – 999 ($$$ only, no cents)
VIOL_NOTICE_DATE	CHAR (6)	Date the final notice (DMV Hold warning) was issued to the violator. Format: MMDDYY
DMV_COURT_CODE	CHAR (5)	DMV applicable requestor code. Unique for each agency. Values: 01010 – CALTRANS 38006 - GGB
FILLER_2	CHAR (88)	Filler data Value: Space
Detail Record Total	**221**	

Figure 22-3 DMV Response File FORMATTED DATA – Detail Structure

22.5 Processing requirements

- The DMV will delete holds from its database and send a response transaction, in the following scenario –

1. The vehicle has been (1) transferred, (2) junked or (3) unregistered and there has been no activity on the record for two renewal periods.
2. Notification is received from the agency that the case was adjudicated (dismissed, recalled etc.)
3. Payment is received at the DMV
4. More than five years have passed since the violation date.

23. Appendix A

23.1 CTOC incoming toll file

```
==> sdgg_20040508_002409.tol <==
#HEADER,TOLL,000216,05/08/2004,SD,GG,05/09/2004,00:24:09
081F8339,0000025184,05/08/2004,11:12:29,00000.50,0015,03
#TRAILER,000216,05/08/2004,000001,0000000.50

==> srgg_20040508_031323.tol <==
#HEADER,TOLL,000366,05/08/2004,SR,GG,05/08/2004,03:13:23
#TRAILER,000366,05/08/2004,000000,0000000.00

==> tcgg_20040508_220000.tol <==
#HEADER,TOLL,000493,05/08/2004,TC,GG,05/08/2004,22:00:00
081E6488,0117704322,05/07/2004,22:09:19,00001.00,3491,12
081F63AB,0117739329,05/08/2004,06:53:49,00002.50,1191,13
08240ADD,0117742568,05/08/2004,07:45:41,00002.50,1191,12
081F7168,0117745531,05/08/2004,08:12:38,00001.00,1217,02
.
.
#TRAILER,000493,05/08/2004,000053,0000085.00
```

23.2 CTOC pay by plate file

```
TRAILER,000642,05/07/2004,000425,0000866.50

#HEADER,PAYBYPLATE,000365,05/08/2004,SR,GG,05/08/2004,03:13:26
2UWT944   ,0521881749,CA,05/06/2004,10:15:21,00001.70,4001,02
#TRAILER,000365,05/08/2004,000001,0000001.70

#HEADER,PAYBYPLATE,000493,05/08/2004,TC,GG,05/08/2004,22:00:00
4LTN203   ,0117710465,CA,05/03/2004,09:25:47,00001.50,2257,13
4DOB430   ,0117717029,CA,05/05/2004,16:23:20,00001.00,1215,02
4EYV460   ,0117717046,CA,05/05/2004,16:30:08,00003.00,1190,12
#TRAILER,000493,05/08/2004,000003,0000005.50
```

SANDAG Agency doesn't send Pay by Plate file

23.3 CTOC Recon Toll

```
#HEADER,RECONCILE,000338,05/07/2004,SD,GG,05/08/2004,17:34:13
081E1EB4,0105739459,05/07/2004,06:59:26,00004.00,4010,08,A
0FCEE2F4,0105739146,05/07/2004,06:53:41,00004.00,4010,08,A
0FCEFAAB,0105736534,05/07/2004,06:13:17,00004.00,4010,02,A
0FCEFBA5,0105751317,05/07/2004,09:20:58,00004.00,4010,09,A
.
.
#TRAILER,000338,05/07/2004,000005,0000020.00,000005,0000020.00

#HEADER,RECONCILE,000479,05/06/2004,SR,GG,05/08/2004,03:13:28
08136C97,0105680708,05/06/2004,07:09:03,00004.00,4010,10,A
0814A1AB,0105695434,05/06/2004,09:48:49,00004.00,4010,03,A
0814F261,0105696915,05/06/2004,10:14:02,00004.00,4010,08,A
081429D9,0105700559,05/06/2004,11:16:47,00004.00,4010,08,A
.
.
#TRAILER,000479,05/06/2004,000008,0000032.00,000008,0000032.00

#HEADER,RECONCILE,000236,05/06/2004,TC,GG,05/07/2004,06:03:54
080398F2,0105727284,05/06/2004,19:36:05,00004.00,4010,02,A
08068165,0105711775,05/06/2004,15:11:59,00004.00,4010,08,A
08068CAB,0105684272,05/06/2004,07:46:29,00004.00,4010,07,A
0806A793,0105688797,05/06/2004,08:33:47,00004.00,4010,02,A
.
.
#TRAILER,000236,05/06/2004,000073,0000292.00,000073,0000292.00
```

23.4 CTOC Recon Pay by Plate

```
#HEADER,PLATERECON,000329,05/07/2004,SD,GG,05/08/2004,19:01:10
#TRAILER,000329,05/07/2004,000000,0000000.00,000000,0000000.00

#HEADER,PLATERECON,000504,05/06/2004,SR,GG,05/08/2004,03:13:34
6B53850   ,0045825303,CA,04/29/2004,21:27:02,00004.00,4010,08,A
#TRAILER,000504,05/06/2004,000001,0000004.00,000001,0000004.00

#HEADER,PLATERECON,000242,05/06/2004,TC,GG,05/07/2004,06:03:58
3RWW754   ,0045825403,CA,04/29/2004,22:59:49,00004.00,4010,08,A
4EBF313   ,0045826055,CA,04/30/2004,07:53:54,00004.00,4010,10,A
4DKU516   ,0045826198,CA,04/30/2004,08:24:13,00004.00,4010,09,A
4AXS202   ,0045826499,CA,04/30/2004,09:22:15,00004.00,4010,09,A
.
.
#TRAILER,000242,05/06/2004,000007,0000028.00,000007,0000028.00
```

23.5 CTOC Tag file

```
#HEADER,TAGS,INIT,000354,05/09/2004,SD,GG,05/09/2004,00:24:41
081E000B,A,V,N,N,N
081E0040,A,V,N,N,N
081E0041,A,V,N,N,N
081E0044,A,V,N,N,N
.
.
#TRAILER,000354,05/09/2004,00025840


#HEADER,TAGS,INIT,001162,05/08/2004,SR,XX,05/08/2004,03:10:02
0810002F,A,V,N,N,N
0810003B,A,V,N,N,N
08100049,A,V,N,N,N
0810006A,A,V,N,N,N
.
.
#TRAILER,001162,05/08/2004,00143110


#HEADER,TAGS,INIT,472546,05/08/2004,TC,GG,05/08/2004,22:00:00
08080180,A,V,N,N,N
0808D6E2,A,V,N,N,N
080C0256,A,V,N,N,N
080C0257,A,V,N,N,N
.
.
#TRAILER,472546,05/08/2004,00566216
```

23.6 CTOC license plate file

```
#HEADER,PLATES,INIT,001183,SR,XX,05/08/2004,03:11:08
00000     ,CA,A,08/30/2001
000000    ,CA,A,08/12/2002
0000035   ,CA,A,07/14/2002
0000036   ,CA,A,07/14/2002
.
.
#TRAILER,001183,05/08/2004,00275483


#HEADER,PLATES,INIT,472546,TC,GG,05/08/2004,22:00:00
1NWK560   ,CA,A,03/18/1996
1NWK560   ,CA,D,02/06/2002
2ECU696   ,CA,A,03/18/1996
2ECU696   ,CA,D,10/27/1999
.
.
#TRAILER,472546,05/08/2004,01405038
```

No plate file was received from SANDAG. Golden Gate CSC contacts (Paul Redman or Hugh) shall provide a sample that'll go here when available.

However SANDAG does not generate pay-by-plate files for posting at BATA CSC.

24. Appendix B

24.1 List of CSC_REASON_CODES

List of codes applicable to Home Agency transactions		
CSC Reason Code	**Status**	**Description**
01	TOLL	Home Agency toll posted successfully as a normal ETC transaction
02	VTOL	Home Agency toll posted successfully as a ETC violation transaction
11	TAGINV	Tag Inventory - Tag is currently in the Vector's Inventory status. This status indicates that Tag is in CSC. Any transactions received on a tag will be a violation transaction and go through the violation processing system)
12	TAGLOST	Tag Lost
13	TAGSTOLEN	Tag Stolen
14	TAGRETURNED	Tag in shipping, Returned Defective, Tag Returned
15	TAGDAMAGED	Tag Damaged
16	INVTAG	Invalid tag
22	DUPL	Duplicate transaction – transaction occurred on the same plaza/lane for a given device at the same date/time.
24	INVACC	Invalid Account
25	INVACCLSP	Invalid Account Closing Pending
26	INVACPEND	Invalid Account Pending
27	INVACRVKF	Invalid Account Revoked Final
28	INVACCLOS	Invalid Account Closed
29	POACHING	Poaching transaction – transaction occurred on same tag and date and time within 5 minutes on the same lane.
31	XLANE	Cross Lane transaction – transaction occurred on same tag and date and time on the same plaza but a different lane.
51	QINVPLAZA	Transaction rejected as invalid due to an invalid plaza
52	QINVDATE	Transaction rejected as invalid due to invalid date
53	QINVAGENCY	Transaction rejected as invalid due to invalid agency code
54	QNONVTRX	Unpostable ETC txn - Invalid tag/account status
98	REQNOTFOUND	Transaction request (tol_trx_type = 3) from GGB Host is not found at CSC
99	OLDREQ	Transaction request (tol_trx_type = 3) from GGB Host is beyond 180 days.

CSC Reason Codes for CTOC transactions		
CSC Reason Code	**Status**	**Description**
06	POST	Transaction posted successfully to a CTOC Agency account due to a tag read at the lanes.
07	PPST	Transaction posted successfully to a CTOC Agency account as a pay-by-plate transaction.
43	TAGB	Transaction happened on a tag with a bad status
45	RJDP	Transaction rejected as duplicate – CTOC transaction occurred on the same plaza/lane for a given device at the same date/time.
46	OLD1	Transaction rejected – Attempt to post the transaction to a closed account after the specified posting limit – 30 days or 60 days (configurable)
48	RINV	Transaction rejected as invalid due to invalid detail data – i.e. if the tag in the transaction is out of range etc.
CSC Reason Codes for Violation transactions		
09	ITOL	Home Agency toll posted successfully to a valid account using license plate information.
100	VCSCRCV	Violation transaction received at CSC
101	VCSCIMGREV	Violation image reviewed at CSC
102	VIMGREVRJT	Violation transaction rejected after image review
103	VPOSTCSC	Violation transaction postable to account at CSC
107	VDMVS	Violation transaction sent to DMV
108	VDMVR	Violation transaction received from DMV
109	VDMVRJT	Violation transaction rejected after DMV request
110	VCITE	Violation transaction sent to notice
111	VDMVHLD	Violation transaction in DMV hold
112	VDMVPAY	Violation transaction paid at DMV Payment
113	VDMVREL	Violation transaction paid at DMV Release
114	VPFULL	Violation transaction paid full
115	VPPART	Violation transaction paid part
116	VCOLLECT	Violation transaction sent to collection
117	VDISS	Violation transaction dismissed
118	VAUTHREJ	Violation transaction authority reject

24.2 List of Interim and final transaction states in Vector

CSC_RESOLV_ CODE	STATUS	Description	Comments
09	ITOL	Home Agency toll posted successfully to a valid account using license plate information.	This is a final state.
100	VCSCRCV	Violation transaction received at CSC	Interim state indicating that the violation has been processed at CSC.

101	VCSCIMGREV	Violation image reviewed at CSC	Interim state indicating violation has completed image review
102	VIMGREVRJT	Violation transaction rejected after image review	Final state indicating image was rejected after image review
103	VPOSTCSC	Violation transaction postable to account at CSC	Interim state indicating violation transaction was associated with an account
107	VDMVS	Violation transaction sent to DMV	Interim state indicating DMV request
108	VDMVR	Violation transaction received from DMV	Interim state indicating response received from DMV
109	VDMVRJT	Violation transaction rejected after DMV request	Final state indicating violation was rejected (maybe name and address unavailable)
110	VCITE	Violation transaction sent to notice	Interim state indicating that the violation is now a “toll evasion”
111	VDMVHLD	Violation transaction in DMV hold	Interim state indicating violation is in DMV Hold
112	VDMVPAY	Violation transaction paid at DMV Payment	Final state indicating payment received
113	VDMVREL	Violation transaction paid at DMV Release	Final state indicating DMV release
114	VPFULL	Violation transaction paid full	Final state indicating full payment was processed for the violation

115	VPPART	Violation transaction paid part	Final state indicating partial payment was received. (Could possibly be waiver of admin fees based on business rules)
116	VCOLLECT	Violation transaction sent to collection	Interim state
117	VDISS	Violation transaction dismissed	Final state indicating violation is dismissed
118	VAUTHREJ	Violation transaction authority reject	Final state indicating violation is rejected (possibly due to business rules)

25. Appendix C

25.1 Transaction Processing Business Rules

Transaction Processing rules depend on several factors including the tag status at the time of the transaction, the facility on which the transaction occurred and whether or not the transaction applies to a Home account. The following categories and rules are established.

HOME Facilities

Transactions received from Home facilities (GGBHTD and Caltrans) are first checked for data validity. The following transactions are rejected without further processing.

- Transactions with invalid plaza, lane, plaza/lane pair or class.
- Transactions with an invalid date or time.
- The transponder ID is not within an accepted range for Home agencies according to CTOC Technical Specification for Interagency Electronic Data Interchange.

All transactions will be processed provided they are received by the RCSC within one year of the transaction date. Those over a year will have a reject code. This is true for both ETC and violations. Otherwise transactions are processed in accordance with the following rules:

Valid Tag, Home Account

- All Home tagged transactions will be posted to Home accounts if the in-lane status of the tag at the time of the transaction was valid (or non-revenue, low balance, etc). These transactions are posted if the account is open regardless of the account balance and may drive the account balance negative. The in-lane status of the tag is reported to the CSC in the transaction record. These transactions will be posted as "TOLL" (aka ETC Toll).

  In exception to this rule, certain transactions will be rejected by the CSC for the reasons listed below. These transactions were indicated as valid in the lane, and therefore have no image and cannot be processed as violators. Rejected transaction will be reconciled as rejected with the appropriate reason code but will not be further processed by the CSC. In all cases listed below the condition for rejection is tested against the account and is not subject to the time when the transaction is received or processed by the CSC. Reject conditions are:

  1. Duplicate transactions. A duplicate transaction is one having the same **transponder ID, plaza, lane date and time** as a transaction previously posted to the account. The duplicate transaction is rejected. (Note that the vehicle class may be different in the duplicate transaction).

2. Skip read transaction. A skip read transaction is defined as a transaction with the same **transponder ID, plaza and lane** and is within 5 minutes (plus or minus) of another transaction previously posted to the account. The 5-minute filter can be configured and 1 minute is the lowest configurable value. The skip read transaction is rejected. (Note that under this rule, depending on CSC processing sequences, the transaction that is rejected could have occurred before or after the transaction that was posted. In addition the vehicle class may be different in the rejected transaction.)

3. Cross lane read transactions. A cross lane read transaction is defined as a transaction with the same **transponder ID and plaza** and is within 5 minutes (plus or minus) of another transaction previously posted to the account. The 5-minute filter can be configured and 1 minute is the lowest configurable value. The cross lane read transaction is rejected. (Note that under this rule, depending on CSC processing sequences, the transaction that is rejected could have occurred before or after the transaction that was posted. In addition the vehicle class may be different in the rejected transaction.)

4. Reported Lost/Stolen transactions. A reported lost/stolen transaction is a transaction where the tag is valid as indicated in the lane but whose date and time is later than the time that it was reported as lost/stolen to the CSC.

5. Closed account – If the account is closed, the transaction is rejected.

A report shall be provided showing transactions that were rejected.

Invalid Tag, Home Account

- All Home tagged transactions will be posted to Home accounts if the lane reported the transaction as a violation (invalid tag status) but the account is open with a positive balance at the time of posting. The transaction is posted at the ETC rate for that class and is not processed as a violation. The transaction will be posted as "VTOL" (aka tagged violation toll, or paid-on-import). Note that this rule does **not** apply to transactions with a tag status of "Lost or Stolen". In this case the transaction is immediately processed as a violation.

  At the time of posting the transaction will be subject to the reject rules above. If the transaction meets any of the reject criteria (1 – 5) it will not be posted and will be processed as a violation.

Valid Tag, CTOC Account

- All CTOC transactions (away tag on home facility) with a valid (i.e. "Valid or "Non Revenue") tag as reported in the transaction will be sent to the CTOC agency for payment without further checking by the RCSC. If rejected by the CTOC agency, the CSC will check the transaction against the appropriately received tag status file for the corresponding date and time to ensure the rejection is correct. If the rejection was not correct, the CSC shall notify BATA and proceed to resolve the issue. In support of this process, the CSC shall maintain received CTOC tag status files for a period of time consistent with CTOC agreements regarding the age of transactions . Transactions that are sent to the CTOC agency for payment will be recorded as "CTOLL" (aka CTOC ETC Toll) transactions.

  These transactions are subject to the reject rules (1 – 3) above as they apply to the current and previous CTOC transaction **file** that is sent to the CTOC agency. For example a transaction is checked to ensure that duplicate transactions are rejected prior to sending to a CTOC agency.

Invalid Tag, CTOC Account

- All CTOC transactions (away tag on home facility) with an invalid tag as reported in the transaction shall be processed as violations.

Pay-by-plate

- Untagged transactions are initially indicated as violations and an image of the license plate is captured. License plates numbers obtained through image review or OCR with sufficient confidence level will be submitted to Vector to determine if the transaction can be posted.

  Home Accounts

  - If the license plate number is found to belong to a Home account that is open with a positive balance, the transaction will be posted at the ETC rate and the violation is not processed. The transaction will be posted as "ITOL" (aka image toll). Otherwise the transaction continues through the violation process (including review against CTOC plate files). License plates shall match to only one account for each transaction date.

    ITOL transactions that can be posted to an account are subject to the following reject rule:

    - If there is another transaction posted to the account for the same plaza and lane and within five seconds (plus or minus) of the posted transaction, the ITOL transaction is rejected with no further processing. BATA reserves the right to revise this rule so that plate transactions are processed as violations when they occur within five seconds of another transaction for the same plaza and lane and posted to the same account.

  CTOC Accounts

  - If the license plate number does not belong to a Home account it is checked against the CTOC license plate files for the time and date of the transaction. In the event of duplicate license plates in the CTOC plate files, the license plate with the most recent effective date shall be used. (This requires that the CSC maintain received CTOC plate status files for a period of time consistent with CTOC agreements regarding the age of transactions). If the plate number had been indicated as valid by the CTOC agency for the date of the transaction it will be submitted to the CTOC agency at the ETC rate and the violation is not processed. The transaction will be recorded as "CITOL" (aka CTOC image toll). Otherwise the transaction is pursued as a violation.

CTOC Reconciliation

Tagged and Plate transactions that are sent to a CTOC agency for payment and are rejected by CTOC are subject to administrative review. No further automatic processing of these transaction has been defined at this time.

In support of billing a CTOC agency, a report will be generated each month consisting of the CTOC agency generated (and received by BATA) **reconciliation files** (tag and plate) for the transaction files sent to that agency for that month. At the option of BATA the RCSC will be required to generate this

same report based on transaction files sent to the CTOC agency for payment. This requirement is necessary in the event the CTOC agency does not generate timely reconciliation files.

AWAY (CTOC) Facilities

Transactions received from CTOC agencies at the RCSC are for trips taken on CTOC facilities by BATA customers (home tag on away facility). These transactions should represent only those for which the BATA CSC indicated that the tag or plate status was valid at the time of the transaction. Transactions received from CTOC agencies are first checked for data validity. The following transactions are rejected without further processing.

- Transactions with an invalid date or time.
- The transponder ID is not within the accepted range for that Agency according to CTOC Technical Specification for Interagency Electronic Data Interchange.

Otherwise transactions are processed in accordance with the following rules:

Tag Transactions

- Vector will attempt to post all tagged transactions received from CTOC agencies. These reciprocal transactions will be compared to the associated tag status file (sent via ftp to the CTOC agency) for the day of the transaction. (This requires that the CSC maintain transmitted CTOC tag status files for a period of time consistent with CTOC agreements regarding the age of transactions and be aware of tag status files that were not transmitted to CTOC agencies due to processing or transmission problems). If the tag was in a valid status, the transaction will be posted. If the tag was invalid, it will be rejected and payment will not be made to the CTOC agency for that transaction.

  At the time of posting the transaction will be subject to the reject rules above. If the transaction meets any of the reject criteria (1, 4 & 5) above it will not be posted to the account. However, with the exception of duplicate transactions (rejection criteria #1), because the tag was indicated as valid in the lane the amount of transaction will be paid to the CTOC agency. Reports must reflect this condition.

Plate Transactions

- Vector will attempt to post all plate transactions (home customer on away facility) received from CTOC agencies. These reciprocal transactions will be compared to the associated plate status file (sent via ftp to the CTOC agency) for the day of the transaction. (This requires that the CSC maintain transmitted CTOC plate status files for a period of time consistent with CTOC agreements regarding the age of transactions). If the plate was in a valid status, the transaction will be posted. If the tag was invalid, it will be rejected and payment will not be made to the CTOC agency for that transaction.

  CTOC plate transactions that can be posted to an account are subject to the following reject rule:

  - If there is another transaction posted to the account for the same plaza and lane and within five seconds (plus or minus) of the posted transaction, the CTOC plate is rejected as a duplicate with no further processing. (Note that these may then be processed as violations by the CTOC agency depending on their business rules).

The required time to maintain received and transmitted tag and plate status files is 180 days.

In support of payment to a CTOC agency, a report will be generated each month consisting of the BATA CSC generated (and sent to that agency) **reconciliation files** (tag and plate) for the transaction files received from that agency for that month.

26. Appendix D

26.1 ACK File Processing

The purpose of the Acknowledgement File (ACK) is to provide a mechanism for verifying proper receipt of transmitted files by the sending party. The ACK file will provide an indication of error or no error as determined by the party receiving the original file. The indication of an error in the ACK file means that the receiving party will not process the corresponding file. The acknowledgement process (generating an ACK file) applies to all files transmitted between the Agency hosts and the Regional Customer Service Center with the exception of the Violation Image Data File (.VDF) and the ACK file itself (i.e. there is no need to ACK an ACK file).

It is the responsibility of the sending party to ensure that an ACK file was received for each file transmitted and takes prescribed action in the event that the ACK file indicated an error or an ACK file was never received. Both the party generating the ACK file and the party receiving the ACK file shall log all ACK files in a database. The ACK file log may be used to resolve problems or provide statistical information via ad-hoc queries.

Conditions may arise that require manual intervention or attention to a reported error. It is the responsibility of the sending party to initiate such action in the appropriate time and it is the responsibility of the receiving party to respond to requests (in the appropriate time) to assist in the resolution of the issue.

ACK file generation and processing:
After creation of the ACK file, the recipient transmits the ACK file back to the sender. It then becomes the responsibility of the original file's sender to examine the contents of the ACK file and, if a non-zero "return code" is found, investigate the problem, correct the file and transmit (see chart) the corrected file back to the recipient for reprocessing. To assist the sender in diagnosing the problem, it is recommended that the recipient provide the sender (via e-mail or other means) with whatever log files are available that detail the nature of the problem detected with the file. Utilization of an automated process which detects all "01" values received and notifies appropriate support staff (via e-mail or other means) is preferred so that problem resolution can be expedited and is not dependent on manual review of processing results.

Receiving an ACK File – ACK files, like other files in the CSC/Plaza interface are "pushed" to the recipients drop-box by the creator of the file and "pulled" from that same area by the receiver of the file. The system software should ensure that the common area is polled periodically and frequently (at least every 15 minutes) to ensure that all files, including ACK files, are received promptly.

ACK file not received – Determining that an ACK file was not received depends on the amount of time the sending party waits for the ACK file before the decision is made. The appropriate amount of "wait-

time" depends on the nature of the file. The wait-time timer starts when the transmitted file is pushed to the shared directory or device. Suggested wait-times for each file type are indicated in the ACK file processing chart below. In any case if it is determined that an ACK file was not received, an error is generated requiring manual intervention (a phone call, etc.). The sending party may or may not continue sending subsequent files of the same type (see ACK file processing chart). Note that the wait-time is independent of the time indicated in the body of the ACK file itself. The recipient is unaware and is not impacted by the sending party's wait-time expiration. Therefore it is possible that an ACK file could be sent to the sending party after the sending party wait-time had expired. However it is expected that the required manual intervention will resolve the issue.

If the wait-time expires prior to receiving an ACK, the sending party will generate an automatic e-mail to a designated list of people. Such e-mails will then continue every eight hours until the problem is resolved.

ACK file received indicating no error – In this case the sending agency logs the ACK file information into the database and continues normal processing.

ACK file received indicating an error – If a return code of 01 is received for any file, the sending and receiving entities will work to resolve the specific issue and recreate and resend the file.

File validation rules

The following chart indicates the required file validations and the suggested return codes. The agencies should review the processing rules for each file type and add additional return codes if necessary. If detailed return codes are not desired, all errors may default to a return code of 01.

Return Code	File Validation
00	No Errors
01	Generic File Error – Not specifically defined.

Processing rules

Tag Files

The Plaza Host will periodically poll the transfer area for tag files. When a new file is received the Plaza Host will load the file and perform certain validations. In all cases the Plaza Host will generate an ACK file and transmit this back to the CSC. The ACK file will contain a SUCCESS code (value 00) if the tag file passed validation and was sent to the lanes or a FAILURE code (value 01) if the tag file failed validation.

The first tag file for each day should be received by 4 am. If it is not received the Plaza Host will automatically send an email to the CSC and Sysops stating the "first tag file is late or missing". No other action will be taken and this check will only be for the 4 am file.

GGB ETC and VIO Recon files

The GGB Host will periodically generate and transmit ETC and VIO files to the CSC. GGB will periodically poll the area ACK files are transferred to the Host by the CSC.

When an ACK file is received the GGB database will be updated. If the ACK file shows a FAILURE code the GGB Host will regenerate and resend the original file. A failure count will be maintained and after 3 concurrent failures of a single file an email will be sent to the GGB System Operators.

If an ACK file is not received within 2 hours of an ETC or VIO file being transmitted to the CSC an email will be generated to the CSC and GGB System Operators. Another email will be sent every 2 hours to a designated list escalating the issue until the situation is resolved.

A recon file should be received within 9 hours of an ETC or VIO Transaction file being transmitted to the CSC and no later than 10 am for the previous day's files.

GGB will periodically poll the area recon files are transferred to the Host by the CSC. When a new file is received GGB will load the file and perform certain validations. In all cases the GGB Host will generate an ACK file and transmit this back to the CSC. The ACK file will contain a SUCCESS code (value 0) if the recon file passed validation and was sent to the lanes or a FAILURE code (value 01) if the recon file failed validation.

A recon file will always be ACKED with a FAILURE code if it is received before the ACK file for the corresponding ETC or Violation Transaction File.

If a recon file is not received within 9 hours or by 10 am for the previous day's files, the GGB Host will automatically send an email to the CSC and GGB Sysops stating the "recon file is late or missing". This check will be repeated every 2 hours and an email will be sent to a designated list escalating the issue until the situation is resolved.

VDF Files

The Plaza Host will periodically generate and transmit VDF files to the CSC. No ACK files or validation is used in this interface.

ACK file Processing Chart

The following table indicates the action taken to a non-zero ACK return code for each of the files defined in the ICD. If an original file is to be corrected and re-transmitted the file name and header information (sequence number, name, create time) must changed prior to resending. Both the sending and receiving parties should store the rejected file.

No	File Name	ACK wait time	Sender Action
1	CALTRANS Tag Status File	1 hr	Investigate problem with file and resend after file is repaired (unless a subsequent tag file has already been sent).
2	GGBD Tag Status File	2 hr	Investigate problem with file and resend after file is repaired (unless a subsequent tag file has already been sent).

No	File Name	ACK wait time	Sender Action
3	CALTRANS ETC Transaction/Violation File	2 hr	Investigate problem with file and resend after file is repaired. Subsequent files may be sent.
4	CALTRANS ETC Transaction Reconciliation Summary File	4 hr	Investigate problem with file and resend after file is repaired. Do not close business day or produce reports based on file. Resolve before send subsequent file.
5	CALTRANS ETC Monthly reconciliation file (revenue attached to lane transactions)	24 hr	Investigate problem with file and resend after file is repaired. Resolve before sending subsequent files.
6	GGBD ETC Transaction File	2 hr	Investigate problem with file and resend after file is repaired. Subsequent files may be sent.
7	GGBD Violation File	2 hr	Investigate problem with file and resend after file is repaired. Resolve before sending subsequent files.
8	GGBD ETC Detailed Reconciliation File	Within 24 hours	Investigate problem with file and resend after file is repaired. Subsequent files may be sent.
9	GGBD Violation Reconciliation File	Within 24 hours	Investigate problem with file and resend after file is repaired. Subsequent files may be sent.
10	CALTRANS Transaction Cancellation File	2 hr	Investigate problem with file and resend after file is repaired. Subsequent files may be sent.
11	CALTRANS Business Day File	4 hr	Investigate problem with file and resend after file is repaired. Resolve before sending subsequent files.

		Acknowledgement File Return Codes	
		00	01
		Successfully Received and Verified	Header/Detail Count Discrepancy
Transaction Files	CALTRANS TXN (ETC and violation) files	Process	Do not process. Follow rules -(1)(3)(4)(6)
	GGBD REQ files	Process	Do not process. Follow rules - (1)(3)(4)(6)

Tag Status Files	**GGBD VIO files**	Process	Do not process. Follow rules - (1)(3)(4)(6)
	CALTRANS Tag files	Process	Do not process. Follow rules - (2)(5)(6)
	GGBD Tag files	Process	Do not process Follow rules - (2)(5)(6)

Rules:

1. Originating Agency should rename 'error' file (including Header) to be a unique file (i.e. before re-transmitting, rename original file with a new filename and since the header record also contains the filename (CALTRANS)/sequence# & createdatetime (GGB), the header should change to reflect the new filename/sequence#/createdatetime). VECTOR does not require maintaining any link between the old 'error' file and the new file.
2. Receiving Agency/CSC should utilize the previous valid file. Originating/Receiving Agency/CSC should escalate immediately to the CSC/Host.
3. Originating Agency/CSC should investigate, repair file as needed and resend.
4. File should not be included on any revenue reconciliation reports.
5. Originating Agency/CSC should investigate
6. Receiving Agency/CSC shall use this code to indicate errors in file sanity (like header record count does not match trailer/record length does not match ICD layout).

27. Appendix E

27.1 File Sanity Checks

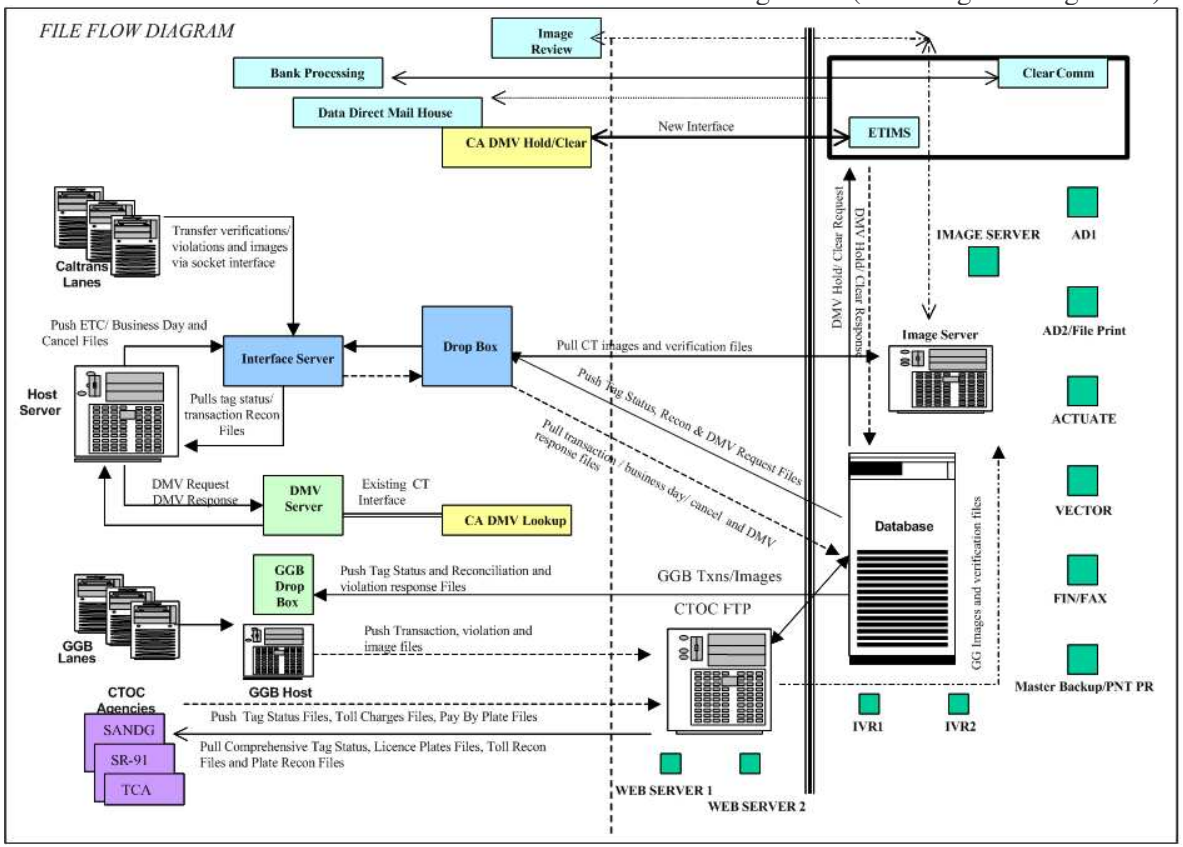
The following validation checks shall be performed by the Agencies on each file received from the RCSC. Any files that fail the indicated validation shall be rejected as per the ICD and have the appropriate values returned to the RCSC as part of the Acknowledgement File:

#	Validation Rule	Files Affected
1.	Header record count is equal to trailer record count is equal to actual record count.	All
2.	Checksum is correct (for files that have a checksum)	All
3.	Filename is formatted as per ICD	All
4.	File can be opened/unzipped	All
5.	Record count of file does not grow by more than 10% of previously processed file nor shrink by more than 2%. For Golden Gate Bridge the record count is the number of records for all agencies added together. For Caltrans the tag status file already represents all records for all agencies.	Tag Status File (ETC)
6.	Tag number contains only HEX digits from 00000000 to 07FFFFFF. Tags are within the defined range for the agency.	Tag Status File (Golden Gate Bridge only)
7.	Numeric fields contain only digits 0-9. Numeric fields are within defined ranges. Tags are within the defined range for the agency.	Tag Status File (Caltrans only)

28. Appendix F

28.1 File Flow

The flow of all files between the BATA CSC and all the other agencies (including home agencies) is depicted below.



28.2 IP Addresses

The following are the IP address of drop boxes which will be used for the transfer of files between the RCSC and all other agencies (including home agencies)

Location where GGB and CALTRANS will drop their Transaction and Images Files

Agency Name	Drop Box IP Address	Directory
GGBD	FTP Server	/ggxat
CALTRANS	FTP Server	/ctxat

Location where GGB and CALTRANS will Pick Up Tag Status and Reconciliation Files

Agency Name	Drop Box IP Address	Directory
GGBD	FIN/FAX Server	.
CALTRANS	FTP Server	/atxct

Location for RCSC System Jobs to drop Tag Status and Reconciliation Files

Agency Name	Drop Box IP Address	Directory
GGBD	FIN/FAX Server	.
CALTRANS	FTP Server	/

Location where CTOC Agencies will drop their reciprocity files to RCSC System

Agency Name	Drop Box IP Address	Directory
SR91	FTP Server	/srxat
TCA	FTP Server	/tcxat
SANDAG	FTP Server	/sdxat

Location where RCSC System will drop reciprocity files to CTOC Agencies

Agency Name	Drop Box IP Address	Directory
SR91	FTP Server	/ioptest
TCA	FTP Server	/ioptest
SANDAG	FTP Server	atxsd

29. Appendix G

29.1 Posting/reconciliation scenario for GGB transactions sent to VECTOR CSC.

This section details the different conditions in which a transaction can be received at the VECTOR CSC from the GGB Host and the various ways the VECTOR CSC shall process the transaction, and how the transaction shall be reconciled back to the GGB Host.

The following section provides the rules that shall be applied to posting transactions received at VECTOR CSC from the GGB Host.

- For all tagged transactions, VECTOR shall post transactions based on the state of the account at the **time of posting**. This shall be applicable to transactions on accounts with negative balances. If the VECTOR CSC determines the financial status is good, then the transaction shall be posted.

- For all untagged transactions, VECTOR shall post based on the state of the account at the **time of transaction**. This shall be applicable to transactions on accounts with LOST/STOL tags. If the VECTOR CSC determines the tag is not on the account, then the transaction is processed as a violation and hence he

- If an invalid (including lost/stolen) CTOC transaction is received in the GGB REQ file, it will be reconciled with a reject status and not sent to CTOC for any processing.

- If a valid CTOC transaction is received in the GGB REQ file, it will always be sent to CTOC for processing.

- If a tagged CTOC violation (including lost/stolen) is received in the GGB vio file, it will be looked-up against the tag status file for that day and if found to be in a good status, will be sent to CTOC for processing.

- A violation is converted to a CTOC pay-by-plate transaction under the following conditions –

- Image review of the violation resulted in a plate number, which matched the CTOC plate file for that day.
- If the plate was not matched in step 1 above, then the notice process generates a 1st notice for this customer. This customer, after receipt of the 1st notice, adds the violation plate to their account, with the respective CTOC agency. The agency then sends this plate as a valid plate in their plate file. The plate sweep process on the CSC picks this plate and dismisses the violation notice.

Similarly any transaction posted at VECTOR CSC with be reconciled back to GGB Host as follows.

- Any tagged transaction posted from REQ files to an home account shall be reconciled back to GGB Host with a PAYMENT_TYPE = 'A' and CSC reason code = 01.

- Any tagged transaction posted from VIO file to a home account shall be reconciled back to GGB Host with a PAYMENT_TYPE = 'A' and CSC_REASON_CODE = 02.

- Any untagged transaction posted from VIO file to a home account shall be only through image, and reconciled with a PAYMENT_TYPE = 'A' and CSC_REASON_CODE = 09

Scenario	Tag Status	Posting Status	RES File Contents
Normal tagged transaction. Tag status file generated at CSC and loaded correctly at the lanes.	Valid	CSC receives transaction with TOL_TRX_TYPE = 1. CSC determines the account has the right financial status and posts the transaction	CSC reconciles transaction to Host with following information. PAYMENT_TYPE = A CSC_REASON_CODE = 01
Tagged transaction. Tag status generated at CSC shows valid. However lane does not have updated tag status and lanes read tag as invalid (account has negative balance).	Valid at VECTOR CSC Invalid at GGB lanes	CSC receives transaction with TOL_TRX_TYPE = 2 in the VIO file. CSC determines the account had the right financial status at the time of posting and posts to account	CSC reconciles transaction to Host with following information in the VRES file. PAYMENT_TYPE=A and CSC_REASON_CODE=02
Tagged transaction. Tag status generated at CSC shows tag as valid.	Valid at GGB lanes (since transaction happened before tag was reported LOST)	CSC receives transaction with TOL_TRX_TYPE = 1 in REQ file. CSC determines that the	CSC reconciles transaction to Host with following information in the RES file. PAYMENT_TYPE= A and CSC_REASON_CODE=01

However customer reports tag as LOST after transaction happened.		tag was on the account at the time of the transaction and hence posts the transaction (provided the financial status on the account is good).	
Tagged transaction. Tag status at VECTOR CSC and GGB Host are in sync. Account has negative balance in VECTOR	Invalid tag read at the GGB lanes.	CSC receives transaction with TOL_TRX_TYPE =2 in the VIO file. CSC determines account has no funds. Hence CSC rejects transaction as invalid.	CSC reconciles transaction back to Host with following information in RES file. PAYMENT_FILE=E and CSC_REASON_CODE=24
Untagged transaction. Tag status at VECTOR CSC shows tag as valid. Lane has problems reading the tag.	Tag not read at GGB lanes.	CSC receives transaction with TOL_TRX_TYPE=2 in the VIO file. CSC sends transaction for image review. Transaction is posted after image review.	CSC reconciles transaction back to Host in the VRES file. PAYMENT_TYPE=A CSC_REASON_CODE=09 (ITOL)
GGB .req file contains transactions with tag status of the transactions in the .req file either in (0,2,3)	Tag status in 0,2 or 3	CSC at the time of posting will look at the account status and if the account financial status is GOOD then the transactions shall be posted	Paid-on-Import CSC reconciles transaction to Host with following information. PAYMENT_TYPE = A CSC_REASON_CODE = 01